DOCUMENT RESUME

ED 459 408 CG 031 457

| | |
|---|---|
| AUTHOR | Gottfredson, Gary D.; Gottfredson, Denise C. |
| TITLE | Gang Problems and Gang Programs in a National Sample of Schools. |
| INSTITUTION | Gottfredson Associates, Inc., Ellicott City, MD. |
| SPONS AGENCY | Department of Justice, Washington, DC. Office of Juvenile Justice and Delinquency Prevention.; Department of Justice, Washington, DC. Bureau of Justice Assistance.; Department of Justice, Washington, DC. National Inst. of Justice.; Office of Educational Research and Improvement (ED), Washington, DC. |
| PUB DATE | 2001-10-00 |
| NOTE | 151p. |
| CONTRACT | 98-JN-FX-0004; 96-MU-MU-0008; R305T000161 |
| AVAILABLE FROM | Gottfredson Associates, Inc., 3239 B Corporate Court, Ellicott City, MD 21042 ($20 plus $5 s/h). For full text: http://www.gottfredson.com. |
| PUB TYPE | Numerical/Quantitative Data (110) -- Reports - Research (143) -- Tests/Questionnaires (160) |
| EDRS PRICE | MF01/PC07 Plus Postage. |
| DESCRIPTORS | Community Involvement; *Delinquency; Intervention; *Juvenile Gangs; National Surveys; Peer Groups; Prevention; School Safety; *Secondary School Students; Secondary Schools; Sex Differences; Tables (Data); *Violence |

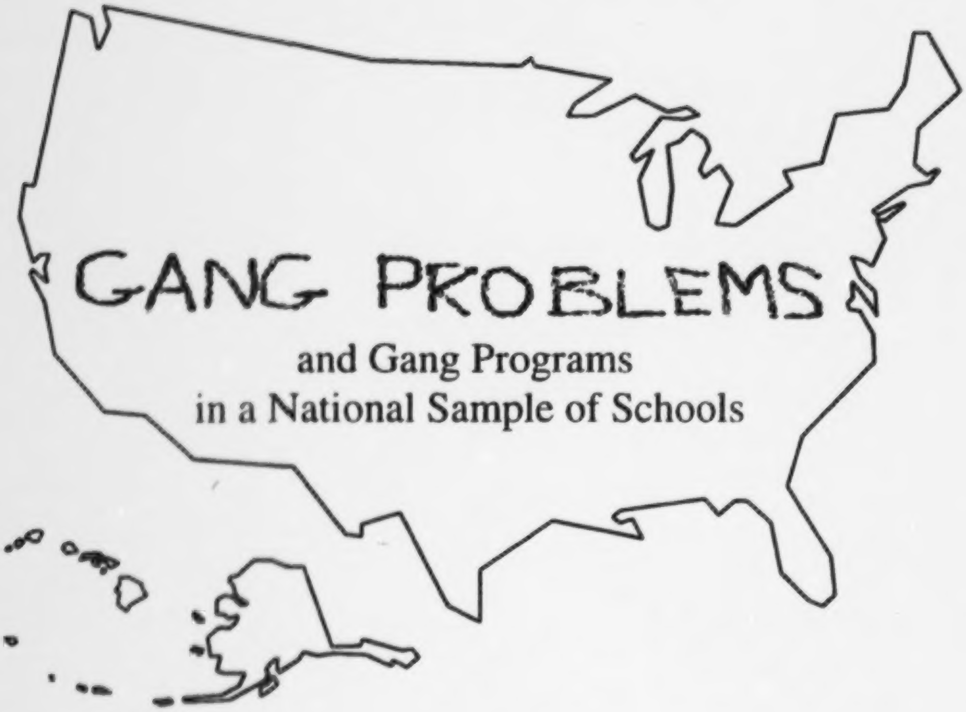
ABSTRACT

This report describes approaches used by schools to prevent or reduce gang involvement among schools. The study of gang prevention and intervention builds on a large-scale National Study of Delinquency Prevention in Schools. A sample of 1,279 schools participated in the study. Overall, 7.6% of the male and 3.8% of the female secondary students reported that they had belonged to a gang. A description is provided of students' involvement with gangs, the characteristics of students who are involved with gangs, and the extent and correlates of gang problems in schools. An explanation is also given of what and how much is being done in schools to prevent or reduce gang-related problems, and to assess how well these prevention and intervention activities are being performed. It identifies features of prevention and intervention activities that local schools and communities can consider to strengthen their programs. Tables are used throughout to explain the types of gang prevention activities available in schools. (Contains 2 appendixes, 36 tables, and 149 references.) (JDM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

TM

ED 459 408



# GANG PROBLEMS
## and Gang Programs in a National Sample of Schools

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
G. Gottfredson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

GOTTFREDSON ASSOCIATES, INC.
*Behavioral Science Research and Development*

CG031457

BEST COPY AVAILABLE

# Gang Problems and Gang Programs in a National Sample of Schools

Gary D. Gottfredson and Denise C. Gottfredson

October 2001

GOTTFREDSON ASSOCIATES, INC.
3239 B Corporate Court · Ellicott City, Maryland 21042

# Acknowledgments

This project was supported by Grant No. 98-JN-FX-0004, awarded by the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice. Additional support was provided by Grant No. 96-MU-MU-0008, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, in cooperation with the Bureau of Justice Assistance, and by Grant No. R305T000161, awarded by the Office for Educational Research and Improvement, U.S. Department of Education. Views expressed are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

We are grateful for the extensive assistance of Ellen R. Czeh. Others who contributed to this research include Suzanne Busby, Rebecca Gold, Elizabeth Jones, Jacob Lawrence, Kirsten Mackler, Felicia Morings, Nicole Piquero, Rebecca Silverman, Adriana Wade and Shannon Womer of Gottfredson Associates. Some of Denise Gottfredson's work was supported by the University of Maryland, and we are grateful for the help of Allison Payne and April Rose of the University of Maryland. David Cantor, Scott Crosse, Irene Hantman, Gary Shapiro, and Lana Ryaboy of Westat also contributed to the project, with support from the U.S. Department of Education.

We are grateful for the endorsement of the project by Thomas F. Koerner, Deputy Executive Director of the National Association of Secondary School Principals, and by Ronald J. Areglado, Associate Executive Director for Programs of the National Association of Elementary School Principals. Letters from these association leaders and from Jeremy Travis, Director of the National Institute of Justice, assisted in encouraging school principals to participate in the project.

Finally we are grateful for critiques on some points and reassurance on others by the following individuals, who kindly read a draft of this report: Finn-Aage Esbensen, Malcolm Klein, James C. Howell. The authors alone are responsible for shortcomings on the present version.

Copyright © 2001 Gottfredson Associates, Inc. All rights reserved.

# Summary

The Survey of School-Based Gang Prevention and Intervention Programs is a study of approaches used by schools to prevent or reduce gang involvement among schools. The study describes students' involvement with gangs, the characteristics of students who are involved with gangs (including their levels of involvement with drugs, weapons, and other forms of delinquent behavior), and the extent and correlates of gang problems in schools. The study also describes what and how much is being done in the nation's schools to prevent or reduce gang-related problems, and to assess how well these prevention and intervention activities are being done. The research identifies features of prevention and intervention activity that local schools and communities can consider to strengthen their programs.

## Study Design

The study of gang prevention and intervention builds on a large-scale National Study of Delinquency Prevention in Schools (G. D. Gottfredson et al., 2000). It makes use of a national sample of schools and the activities they are undertaking to prevent problem behavior and promote safe and orderly school environments.

Five main kinds of information were collected.

1. Examples of prevention and intervention models being used in schools were collected, examined and classified to develop a comprehensive taxonomy of activities. The resulting taxonomy guided the development of other data collection instruments.

2. Principals in a national probability sample of schools were surveyed to identify activities their schools had in place to prevent or reduce gang involvement, delinquency, drug use, or other problem behavior or to promote a safe and orderly school environment. Principals also described features of their schools and reported on past experiences with the implementation of programs and on school staffing.

3. Individuals knowledgeable about prevention or intervention activities in each school (called "activity coordinators") were surveyed to obtain detailed descriptions of specific prevention activities and to describe certain features of their school. Activity coordinators also reported about themselves and about school support and supervision for prevention activities.

4. Teachers and students in participating schools were surveyed to obtain their reports about victimization, safety, gang participation, delinquent behavior, school orderliness, and other aspects of school climate. Generally, all teachers in participating schools were sampled, and a sufficient number of students were sampled to produce an estimated 50 respondents per school.

5. Principals were surveyed for a second time. They reported about gang problems, school wide disciplinary policies and practices, crimes occurring in the school, and other characteristics of the school.

A sample of 1279 schools was designed to describe schools in the United States. Participation was obtained from principals in 66% of schools in the initial principal survey and 50% of the schools in the second principal survey. Of 847 secondary schools asked to participate in surveys of students, 37% did so – greater cooperation was obtained from middle schools than from high schools, and rural schools cooperated more often than urban schools. In participating schools the mean student response rate was 76%. Of 847 secondary schools asked to participate in teacher surveys, 48% did so. In participating schools the mean teacher response rate was 78%. When both school and coordinator participation are considered, a final 52% response rate was obtained in the survey of activity coordinators. Weights to take account of the sample design and survey non-response are applied in making tabulations.

## Gang Participation

Overall, 7.6% of male and 3.8% of female secondary students reported that they had "belong[ed] to a gang that has a name and engages in fighting, stealing, or selling drugs" in the last 12 months. Because of the possibility that some students fail to take survey self-reports seriously, a Veridicality index was used to identify students who make inconsistent responses. When only responses from students with acceptable scores on the Veridicality index are examined, 7.1% of males and 3.6% of females reported gang participation.

Youths who participate in gangs have much lower educational expectations than do other students, and are very much more likely to be threatened or victimized in school. For example, 28% of gang-involved boys but only 5% of other boys reported that they had been threatened with a knife or a gun in the current year in school. Corresponding percentages for girls were 18% of gang-involved girls but only 2% of other girls. Gang involved boys and girls are more often afraid of being hurt or bothered in school and away from the school than are other students.

Statistical models of the likelihood of gang participation imply that being male, not being non-Hispanic White or Asian; having low commitment to education, low belief in conventional rules, or delinquent peers; and feeling unsafe or fearful in school are associated with gang involvement. Low commitment, low belief, delinquent peers, and fear make substantial direct contributions to gang involvement. (Community and family variables were not examined by these models, and models based on cross sectional data may not reflect causal processes.)

Gang participants are very much more involved with drugs than are other students. For example, 54% of male gang participants versus 9% of non-participants sold marijuana or other drugs in the last 12 months (42% and 4% of females, respectively). For drugs that have lower base rates for use, the contrast between gang participants and others is even sharper; 18% of male gang participants and 1% of nonparticipants report using heroin (23% and .6% of girls) in the last 12 months.

Gang participants are much more likely than other students to have carried a hidden weapon other than a pocket knife (51% of gang involved boys versus 9% of others; 32% and 2% of girls). Gang participants of both sexes are much more involved in violence such as hitting teachers or other adults, robbery, and fighting. Carrying a concealed weapon is strongly associated not only with gang participation but also with use of crack, heroin, cocaine, and other drugs. Although carrying a concealed weapon is associated with fearfulness, the association is weak compared to its association with gang or drug involvement.

## Gang Problems in Schools

Definitions of gang problems differ from one study to another. In the present research, principals were told that "a 'gang' is a somewhat organized group, sometimes having turf concerns, symbols, special dress or colors. A gang has a special interest in violence for status-providing purposes and is recognized as a gang by its members and by others." They were asked whether gangs are a problem in the school or in the community. Overall 5% of principals reported that gangs are a problem in their schools and 36% reported a gang problem in the community. Urban principals and principals of secondary schools were more likely to report school gang problems. Principals are also more likely to report gang problems when the school enrolls relatively many Hispanic students. Principals' reports of school gang problems do not show strong convergence with other measures of problem behavior in schools or with the percentage of schools' students who report that they participate in gangs. In the 10% of schools with the highest student gang participation rates (14.4% or more of students reporting gang participation), only 18% of principals report that gangs are a problem in the school. Nevertheless, principals' reports of school gang problems are associated with more victimization, less safety, and poorer administrator leadership according to teacher reports.

A statistical model of the extent to which schools have high rates of student self-reported gang participation implies that concentrated poverty and disorganization in the community, public school auspices, receiving students with behavior problems from various sources, and student perceptions that the school is unsafe (or fear) influence levels of student gang participation. The association of perceptions that the school is unsafe with gang participation rate is especially strong. The correlation between the square root of the percentage of students who reported gang participation and scores on a school Safety scale is -.49, and this correlation is scarcely reduced at all (to -.46) by the application of statistical controls. Although interpretation of these preliminary results should be tempered by the possibility that some of this association may be reciprocal in the sense that gang activity may lead to fear as well as fear leading to gang participation, the finding suggests that maintaining safe environments may be helpful in reducing gang participation.

## School-Based Gang Prevention and Intervention Programs

We define a gang prevention activity as one that aims to reduce or prevent gang involvement. A gang intervention activity is defined as a program the activities of which are directed at youths who are gang members. From the survey of program providers we estimate that there are 781,800 gang prevention activities underway in the nation's schools, and 159,700 gang intervention activities. Most of these programs are not limited to a gang prevention focus but are also concerned with other forms of problem behavior.

The most common type of program intended to prevent or reduce gang involvement entails prevention curriculum, instruction, or training. About 15% of all gang prevention programs are of this type (about 115,400 such programs in U.S. schools). Naturally, many of these programs are also directed at other objectives such as reducing drug use or other problem behavior. About 11% of school based gang prevention programs involve efforts to create or maintain a distinctive school culture or climate for interpersonal exchanges; and about 8% involve recreation, enrichment, or leisure activities. Other types of prevention activities are less common. Fewer than 3% of gang prevention programs involve youth roles in regulating or responding to student conduct (e.g., conflict resolution, mediation, or youth courts), but there are so many schools and so many programs in the nation that this nevertheless amounts to about 20,500 such programs.

By far the most common type of gang intervention program involves counseling, social work, psychological or therapeutic intervention – with over 20% (or about 32,700) programs of this kind. About 13% of gang intervention activities in schools involve prevention curriculum, instruction or training, 12% involve services or programs for family members, 10% are behavioral interventions, 10% seek to influence school culture or climate, and 10% seek to improve intergroup relations or relations between the school and the community.

## Quality of Gang Prevention and Intervention Programs

Like anything else done in schools, gang prevention or intervention programs may be well implemented or poorly implemented. They may employ practices that are found in programs that have been shown to be effective in prior research, or they may fail to use such practices. They may be transitory, or they may be implemented consistently over long periods of time. The typical participant may participate a great deal, or the dosage may be very small. The activity may be widely applied or be very limited in scope – involving a small percentage of students or school personnel.

The indicators of program quality developed for the National Study of Delinquency Prevention in Schools (Gottfredson et al., 2000) were applied to measure the quality of gang prevention and gang intervention activities. Data to describe the quality of prevention and intervention activities come from the reports of program coordinators in Activity Questionnaires asking about fourteen specific types of "discretionary" program activity.

Differences were observed among the average quality of implementation of activities of different types, and great variability was observed in the quality of implementation of activities of each type.

The average gang *prevention* program involving curriculum, instruction or training can be characterized as follows:

- One or more persons is conducting it *from time to time*;
- It employs 88% of the *content* elements identified as representing best practices;
- It employs 50% of the *methods* elements identified as representing best practices;
- It involves 28 sessions or lessons;
- It lasts about 23 weeks;
- Students participate once per week or slightly more often;
- 47% of the school's students participate or are exposed.

The average gang *prevention* program involving counseling, social work, psychological, or therapeutic activity can be characterized as follows:

- One or more persons is conducting it *from time to time*;
- It employs 35% of the *methods* elements identified as representing best practices;
- It involves 13 sessions or lessons;
- It lasts about 20 weeks;
- Students participate about 3 times a month;
- 29% of the school's students participate or are exposed.

Counseling, social work, psychological, or therapeutic activities constitute the most common gang *intervention* approach. The quality of counseling gang intervention activity resembles the quality of counseling prevention activity. For several types of activity, however, gang *intervention* activities are sometimes implemented with greater strength and fidelity to best practices than are the less targeted gang prevention activities. Curricular gang *intervention* programs can be characterized as follows:

- One or more persons is conducting it *from time to time,* but significantly more frequently than prevention programs are conducted;
- It employs 81% of the *content* elements identified as representing best practices;
- It employs 56% of the *methods* elements identified as representing best practices (significantly better than prevention programs);
- It involves 39 sessions or lessons;
- It lasts about 23 weeks;
- Students participate once per week or slightly more often;
- 42% of the school's students participate or are exposed.

In some respects the quality of gang intervention programs involving classroom organization and management, improvements to instructional methods, or the involvement of youths in school discipline is somewhat higher than gang prevention programs of the same type.

The typical gang prevention or intervention program implemented in schools does not compare favorably with the characteristics of effective programs – for those kinds of programs that have been the subject of research. An exception is classroom organization and management interventions directed at gang members, which make use of a high proportion of best practices and are sometimes used regularly by school personnel; but this type of intervention is relatively rarely used.

There is much room for improvement in the quality of gang prevention and intervention programs in the nation's schools.

## Participation in Programs by Gang Involved Youths

Gang involved secondary school students are usually less likely to be involved in or exposed to most kinds of gang prevention or intervention programming. For example, in the current year 39% of gang involved males received instruction in ways to avoid getting involved in problem behavior such as fighting, drug use, or risky behavior compared to 49% of other male students. Among females, 37% of the gang involved and 57% of others received such instruction. Students who are gang participants are much less likely to participate in special events, recreation or activities inside or outside of the school and much less likely to report that teachers have engaged in sound classroom management procedures.

Gang participants – both boys and girls – are about twice as likely as other students to be referred or have their family referred by the school to another agency for some kind of help, and the school is somewhat more likely to have worked with the gang participants' families. Gang involved girls are more likely than other girls to be advised by a school counselor, social worker or psychologist about ways to avoid involvement with drugs or violence than are other girls (42% versus 34%). In contrast, gang involved boys are less likely than other boys to be advised by a school counselor, social worker or psychologist (29% versus 35%).

## Quality of Gang Prevention or Intervention Activity, Perceptions of Gang Problems, and Formal Needs Assessment

Programs that were developed following a formal needs assessment are implemented in significantly stronger form than those not based on a needs assessment. Programs guided by a needs assessment are of higher overall quality, of longer duration, make more use of best practices with respect to the methods employed, involve a larger proportion of students, and achieve a higher level of use by school personnel. In all, 46% of gang prevention or intervention programs were guided by a formal needs assessment – which may have been perfunctory.

School gang prevention or intervention programs are somewhat more likely to have been developed following a formal needs assessment in schools in which the principal reports that gangs are a problem in the school than in schools in which the principal reports no problem. And the programs are more likely to target gang members (as opposed to being more general prevention efforts) in schools in which the principal reports that gangs are a problem in the school.

## Limitations of the Research

The most important limitation of the research is that the assessment of program quality depends on judgments by the authors about the aspects of quality to measure. Guided by their understanding of the literature on the efficacy of problem-behavior-prevention programs, they emphasized measures of dosage and those aspects of interventions that appear to be associated with effectiveness in program research. They also emphasized the extent of coverage on the grounds that interventions reaching large portions of the population are likely to have more aggregate effect. This approach to assessing program quality is a limitation because when there has been little or no research on a type of prevention or intervention activity, there is little basis for assessing program quality.

A second limitation is that results are based on a sample survey involving the reports of program implementers, principals, teachers, and students. In all surveys, respondents' reports are of imperfect reliability and validity. The method depended upon the principals' identification of prevention and intervention activities in their schools – and the correct classification of those activities. Nonparticipation in surveys may also bias results in unknown ways.

The research incorporated steps to cope with these limitations. Nonresponse adjustments were made in producing estimates (and nonresponse adjustments as well as the complex sample design were taken into account in estimating standard errors). Student self-reports of gang involvement were examined for the potential of invalid reporting to bias estimates of gang participation upwards, and estimates excluding responses that appear to be invalid were made. Including or excluding student respondents with low scores on a Veridicality index has little effect on patterns of association of gang participation with other measures.

Despite these limitations, the results provide new information on the extent of youth participation in gangs, the relation of individual gang participation to personal characteristics and problem behaviors, and the kinds of schools that tend to have greater problems with gangs. Results also provide the first comprehensive description of the nature and extent of gang prevention and intervention activity in schools, and the extent of exposure of young people to those programs. Results indicate that it is possible to measure some aspects of program quality through questionnaire surveys.

## Some Implications

Results imply that there is great variability in the quality of school-based gang prevention and intervention programs. Perhaps most importantly, they imply that there is much room for the improvement in the quality of programs in some straightforward ways. This includes increases in the use of practices with respect to program content and methods that are found in programs that have been evaluated and found to be effective. It includes increases in the intensity (duration and frequency) with which programs are operated, and it includes increases in extent of their application.

Results show that secondary school students who report being involved in gangs are less exposed to many prevention activities than are students who are not involved in gangs. This suggests the potential for including more of the highest risk youths by actively seeking ways to include them. An analysis of the forces that limit the participation of gang-involved youths from participation should be a part of the planning of any gang prevention or intervention program, with program design features or arrangements put in place to cope with or minimize the influence of these forces.

Fewer than half of gang prevention or intervention programs have been guided by a formal needs assessment. Goldstein and Kodluboy (1998) among others have emphasized the importance of a comprehensive assessment of problems, and the development of programs only after such assessment. Evidently, there is much room for the increased practice of needs assessment in program planning. Formal planning was associated with stronger programs in the present research. Other correlates of the quality of school-based prevention programs are described by G. D. Gottfredson et al. (2000).

Formal needs assessment may contribute to (or depend on) principals' willingness to identify problems related to gangs. The finding that principals usually reported that gangs are not a problem even in schools with a high percentage of students reporting that they participate in gangs suggests that lack of principal recognition of problems may be an obstacle to the development of effective prevention and intervention programs. At the very least, the results imply that principals' reports that gang activity is not a problem should be met with skepticism unless evidence from other sources confirms the reports.

In an earlier report (G. D. Gottfredson et al., 2000) we showed that principals' reports of school crime show little convergence with reports by students and teachers of school safety, problem behavior, victimization, or classroom order. When combined with the present observation that principals' accounts of school gang problems are of limited validity, those results suggest the possibility that school leaders are an obstacle to confronting problems of school safety – including gang problems.

The results extend those of earlier research on gangs in schools (Howell & Lynch, 2000) by including measures of individual gang participation and by allowing an examination of rates of gang participation in specific sampled schools. Individual gang participation – and rates of gang participation in schools – is strongly associated with fear (or perceptions that the school environment is not safe), drug involvement, and other forms of problem behavior. The analyses conducted do not allow a determination about the extent to which fear or unsafe school environments contribute to gang involvement versus the extent to which gang involvement produces fear or unsafe environments. The strong inverse link between perceptions of school safety and levels of gang involvement suggests that efforts to promote a safe environment and make all students feel safe may reduce the risk of youth gang involvement.

# Contents

Acknowledgments ii

Summary iii
  Study Design iii
  Gang Participation iv
  Gang Problems in Schools v
  School-Based Gang Prevention and Intervention Programs vi
  Quality of Gang Prevention and Intervention Programs vi
  Participation in Programs by Gang Involved Youths viii
  Quality of Gang Prevention or Intervention Activity, Perceptions of Gang Problems, and Formal Needs Assessment ix
  Limitations of the Research ix
  Some Implications x

1. Studying Gang Problems and School Gang Programs 1
  Definition of Youth Gang and Gang Participation 3
  Nature of Gang Problems 5

2. Schools and Gang Prevention or Intervention 9
  Types of School-Based Programs 10

3. The Research Questions 23
  Questions About Gang Participation 23
  Questions About Schools and Gang Problems 23
  Questions About School Programs 24
  Subsidiary Questions 24

4. Methods 25
  Overview 25
  Sampling 26
  Conducting Surveys and Participation Rates 30
  Weighting and Statistical Procedures 31
  Validity Checks 33
  Ethnicity 34

5. Student Gang Participation 35
  Extent of Gang Membership and Demographic Characteristics 35
  Veridicality of Self-Reported Gang Membership 37
  Characteristics of Gang Participants and Other Youths 39
  Predicting Gang Participation 44
  Gang Participation, Delinquent Behavior, and Drug Use 47

An Unexamined Issue . . . . . . . . . . 57

6. Schools and Gang Problems . . . . . . . . . . 59
  Principals' Reports of Gang Problems . . . . . . . . . . 59
  Relation of Principal Reports of Gang Problems to School and Community Characteristics . . . . . . . . . . 59
  Relation of Rate of Student Gang Membership to School and Community Characteristics . . . . . . . . . . 67

7. School-Based Gang Prevention and Intervention Programs . . . . . . . . . . 73
  Number and Types of Programs . . . . . . . . . . 73

8. Assessment of Program Quality . . . . . . . . . . 77
  Measures of Program Quality . . . . . . . . . . 78
  Outcomes of Quality Assessments . . . . . . . . . . 89
  Summary . . . . . . . . . . 99

9. Participation in Prevention or Intervention Activities by Gang Involved and Other Youths 101

10. Needs Assessment and Program Quality . . . . . . . . . . 107

11. Discussion and Limitations . . . . . . . . . . 111
  Limitations of the Research . . . . . . . . . . 111
  Some Implications About the Nature of Gang Problems . . . . . . . . . . 112
  Some Implications for School-Based Gang Programs . . . . . . . . . . 114
  Implications for Gang Prevention and Intervention in General . . . . . . . . . . 116

References . . . . . . . . . . 117

Appendix . . . . . . . . . . 129

# 1. Studying Gang Problems and School Gang Programs

This report describes the methods and findings of a large-scale study of the nature and extent of youth gang involvement by secondary school students and of the nature and extent of gang prevention and intervention approaches used by elementary, middle, and high schools in the United States. The report describes students' involvement with gangs, the characteristics of students who are involved with gangs (including their levels of involvement with drugs, weapons, and other forms of delinquent behavior), and the extent and correlates of gang problems in schools. The report also describes what and how much is being done in the nation's schools to prevent or reduce gang-related problems, and assesses how well these prevention and intervention activities are being done. Finally, the report identifies features of prevention and intervention activity that local schools and communities can consider to strengthen their programs.

Juvenile gang participation plays a special role in the amount of delinquent behavior youths display and in the level of risk they incur. Among the conclusions of the OJJDP Study Group on Serious Violent Juvenile Offenders (Loeber & Farrington, 1998) are that a relatively small number of individuals are responsible for a large amount of crime, and that the risk increases when a youth enters a gang or starts to sell drugs. In both Denver and Rochester, youths who were gang members were involved in very much more offending (street offenses, serious offenses, minor offenses, drug sales, alcohol use, and other drug use) than were other youths — and were much more likely to be arrested (Esbensen, Thornberry, & Huizinga, 1993). Although gang members engaged in much crime before identifying with a gang, their offending rate was higher during their gang years, and the rate decreased after leaving the gang. The pattern of concentration of delinquent acts among gang members is now well established, having been found in additional research in different cities (Fagan, 1990b; Thornberry, 1998).

One source of information about the extent of youth gang problems is the National Youth Gang Survey, conducted annually in recent years (National Youth Gang Center, 1997-1999). In the most recent 1999 survey (Egley, 2000), 44% of police agencies reported active youth gangs in their jurisdictions. Although the percentage of agencies reporting youth gangs was highest in large cities (66%), gangs were also reported by suburban county (47%), small city (27%), and rural county (18%) police agencies. Despite stereotypical perceptions that gangs are creatures of certain large urban centers, youth gangs are found outside of these centers as well (Klein, 1995). Of law enforcement agencies reporting gang problems, 69% expected the problem to stay the same or get worse (Egley, 2000). According to the National Youth Gang Survey and related earlier inquiries by Klein (1995), the extent of gang activity in the nation increased since the 1960's or 1970's (Curry, Ball, & Decker, 1996; Hagedorn, 1998; Miller, 2001), although the percentage of police agencies reporting gang activity in their jurisdictions has decreased somewhat since 1996 – remaining high, however (Egley, 2001).

A second source of information about youth gangs is the long tradition of observational/descriptive research by criminologists who have conducted studies of single gangs or gangs in specific cities (e.g., Decker & van Winkle, 1994; Hagedorn, 1988; J. W. Moore, 1978; Spergel, 1966; Thrasher, 1927). This line of inquiry has generated a general picture of youth gangs as (a) each being different in some ways from every other, (b) typically involving young people who are loosely organized and who engage in relatively large amounts of miscellaneous delinquency, (c) engaging in a lot of other behavior – such as simply hanging out, and (d) sometimes involving turf defensive or retaliatory violence. A third source of information has been inquiries involving samples of individuals identified by police agencies as gang members. For example, Curry, Ball, & Fox (1994) conducted interviews with police departments, and interviews by Skolnick (cited by Klein, 1995) suggested that at least some gangs may be more organized for business activity in the illegal drug trade than is characteristic of street gangs. Huff (1998) studied small samples of individuals who were gang members according to police and found very high rates of carrying concealed weapons, carrying knives or guns in school, assaults, thefts, drug use, and drug sales.

Finally, occasional sample surveys of youths provide additional information on the extent and distribution of gang involvement. In the School Crime Supplements (SCS) to the National Crime Victimization Surveys, students aged 12 to 19 were interviewed at home and asked to report if "street gangs" were present at their schools.[1] Based on these surveys, Chandler, Chapman, Rand, & Taylor (1998) estimated that 15% of students reported gang presence in 1989 and 28% reported gang presence in 1995.[2] Questions in the SCS on which these estimates are based did not require involvement in illegal activity, drugs, or fighting, so some respondents may have been describing groups that would not meet most definitions of delinquent gang or street gang.[3]

---

[1] Respondents in both the 1989 and 1995 Supplements were asked, "Are there any street gangs at your school?" Later in the 1995 Supplement, interviewers were to read the following statement: "We'd like to know a little more about any gangs at or around your school. You may know these as street gangs, fighting gangs, crews, or something else. For this survey, we are interested in gangs that may or may not be involved in violent or illegal activity." Then the interviewer asked, "Do any of the students at your school belong to a street gang?" and "What about gangs that don't have members attending your school . . . have any of those gangs come around your school in the past six months?" (". . ." was printed in the original and does not indicate an ellipsis). The results reported in the text are based on responses to the first question that was not accompanied by any definition of street gang. In further analysis of the 1995 data, Howell and Lynch (2000) combined responses to all three items to estimate that a gang presence was reported by 37% of students.

[2] The difference between these percentages is many times the standard error of either (.4% and .7%, respectively). For some reason, the percentage of respondents answering "don't know" was very much higher in the 1995 survey – 5.2% versus 13.5%, also much larger than the standard errors (.3% and .5%, respectively).

Esbensen and Winfree (1998) have pointed out that much of what is known about the demographic characteristics (ethnicity, sex) of gang participants is derived from studies of specific gangs or cities which by their nature (e.g., focusing on specific neighborhoods) limit their usefulness for examining demographic correlates of gang participation. Accordingly Esbensen and Winfree's (1998) examination of gang membership in surveys of almost 6,000 eighth grade students in 42 schools in 11 school districts is of special importance. According to a self-report measure of involvement in delinquent gangs, almost 11% were identifed as gang members. In contrast to the typical conclusion from other forms of research, 38% of gang members were female and 25% were white. Furthermore, although not engaging in as much delinquent behavior as boys who were gang members, girls who were gang members reported a great deal of delinquent behavior and much more than boys who were not gang members.

## Definition of Youth Gang and Gang Participation

The field of gang research lacks complete consensus on the definition of youth gang, and therefore it lacks consensus on what gang participation would entail. Spergel and Chance (1991) offered the following definition of a gang:

> A somewhat organized group of some duration, sometimes characterized by turf concern, symbols, special dress, and colors. It has special interest in violence for status-providing purposes and is recognized as a gang by both its members and by others. (p. 23)

Miller (1992) offered a similar definition:

> A youth gang is a self-formed association of peers, united by mutual interests, with identifiable leadership and internal organization, who act collectively or as individuals to achieve specific purposes, including the conduct of illegal activity and control of a particular territory, facility, or enterprise. (p. 21)

Howell (1997) echoed Miller's definition in introducing the report of the OJJDP Panel on Serious Violent Juvenile Offenders. He characterized gangs as informally organized, having identifiable leadership, claiming turf, and in continual association. As a practical matter, involvement in delinquency and recognition as a gang has been a useful definition for research (Esbensen, Huizinga, & Thornberry, 1993).

---

[3] Howell and Lynch (2000) show that when respondents answer any of the three questions described in footnote 2 affirmatively, 50% indicate that the gang is involved in violence (with 21% answering don't know).

At the same time, gangs can and have been defined without reference to crime or delinquency. J. W. Moore (1998) specified three criteria that distinguish street gangs from other American youth groups: (1) "the group must define itself as a gang" and determine its own structure and norms, (2) "unsupervised young people are socialized by each other (and slightly older peers) more effectively than by conventional agents of socialization (families and schools)" and "socialize each other to toughness and to the routine use of violence," and (3) "they develop the capacity for reproduction – meaning that they recruit continuously, with places for younger members, and that they extend respect and solidarity toward older members" (p. 67). According to Moore, gangs *sometimes* involve criminality. Although Moore's definition may have virtue in avoiding the inclusion of criminality by definition, it contains assumptions about the social origins of gangs that may appropriately be objects of inquiry rather than definition.

Some definitions *potentially* include activity that other definitions might exclude. For example, Howell and Decker (1999) exclude motorcycle gangs, prison gangs, racial supremacists, and other hate groups. Some research relies on police agency representatives' designation as a group as a youth gang and explicitly exclude some types of gangs. The National Youth Gang Survey questionnaire (National Youth Gang Center, 1997-1999) tells respondents a youth gang is "a group of youths or young adults in your jurisdiction that you or other responsible persons in your agency or community are willing to identify or classify as a 'gang.' **Do not** include motorcycle gangs, hate or ideology groups, prison gangs, or other exclusively adult gangs."[4] J. W. Moore (1998) excluded various youth groups in a footnote to her definition of youth street gangs: "They are not play groups; they are not taggers, stoners, skinheads, cultists, bikers, or mall rats. They are not youth subculture groups, like England's teddy boys; nor are they soccer hoodlums" (p. 76).

In the present research, gangs and gang participation were operationally defined in two ways. First, in asking school principals about gangs we indicated that, "A 'gang' is a somewhat organized group, sometimes having turf concerns, symbols, special dress or colors. A gang has a special interest in violence for status-providing purposes and is recognized as a gang by its members and by others." This definition emphasizes recognition as a gang with other characteristics sometimes being present. Second, in asking youths about their own participation in gangs we asked if respondents had, "belonged to a gang that has a name and engages in fighting, stealing, or selling drugs."

---

[4] In some respects, the definitions of youth gang used in some research appear to be devised so that it is unobjectionable to respondents who may have varying personal or organizational views on what constitutes a gang – rather than on research showing that different kinds of criminal groups involving youths (such as skin heads who may mark territory, assault persons of minority groups, and be recognizable as a distinct group) have properties that indicate their separate classification. All of the definitions have some degree of "you will know a gang when you see it" quality. There is a tradition of disagreement on definitions (Spergel, 1990).

A disadvantage of the definitions adopted in the present research is that they include criminal behavior *by definition*. The definition used with principals makes reference to a special interest in violence, and the definition used with youths refers to fighting, stealing, or selling drugs. The definitions used distinguish between groups of "skaters" or "goths" on the one hand and a delinquent gang on the other, but by including delinquency in the definition they lose some of their explanatory potential. Because nearly all youths engage in some amount of delinquent behavior, perhaps all youth peer groups are in some sense delinquent gangs. The virtue of the present definition is that it may be expected to identify those peer groups which are (as Hagedorn, 1998, put it) "on the wild side of the continuum" (p. 367).

Because gangs are often engaged in crime by definition, and because of the compelling evidence that gang members engage in crime at high rates, targeting gangs and gang members could be a fruitful approach to reducing crime. The evidence that youths involved in gangs engage in relatively high rates of delinquency both before and after active gang involvement, however, implies that more general risk factors for delinquency ought to be considered in prevention or intervention efforts directed at gang participation. This implication is supported by overwhelming evidence that persons who engage in one form of problem behavior or crime are likely to engage in other forms (Farrington, 1998; M. R. Gottfredson & Hirschi, 1990).

## Nature of Gang Problems

Without question, youths who are involved with gangs engage in a great deal more delinquent behavior than do youths who are not involved in gangs. And without question, youths who associate with delinquent peers also engage in much more delinquent behavior than do others. A continuum of interpretation of these facts is possible. At one end, one may interpret gang involvement itself as a form of delinquent behavior – a form that is of a relatively serious nature with a low base rate. Naturally it is associated with all of the other forms of delinquent behavior that high rate delinquents commit. At the other end are the interpretations of J. W. Moore (1991) who wrote that the Chicano gangs she studied "are [not] at the rowdy end of the continuum of local adolescent groups – they are now really outside that continuum" (p. 132) and Klein (1995) who wrote "street gangs are something special, something qualitatively different from other groups and other categories of law breakers" (p. 197).

Data from surveys of youths have shown strong associations between participation in gangs and levels of delinquent behavior. Battin, Hill, Abbott, Catalano, & Hawkins (1998) compared both self-reported and court-recorded offense frequency for a large number (643) of Seattle youths aged 14 and 15 with offense frequency of a small number (87) of youths of the same age who reported association with delinquent peers and a still smaller number (51) of youths who reported that they belonged to a gang. Frequency of both violent and non-violent offenses were much higher according to both sources of crime data for gang members than for the other two groups. Similar results were observed for both male and female 15-year old Rochester youths (although the number of girls studied was very small). Past-year frequency of general delinquency, violent delinquency, drug selling, and drug use were all higher for gang members (Battin-Pearson, Thornberry, Hawkins, & Krohn, 1998; Thornberry, 1998). Much higher levels of assaults were also observed for Denver gang members aged 14 to 19 years compared to non-members with delinquent friends among both boys and girls by Huizinga in a 1996 study (cited by Thornberry, 1998). Gang membership was found to be predictive of self-reported violence when other characteristics of the individual (family poverty, parental supervision, commitment to school, negative life events, prior violence, and delinquent peers) were statistically controlled in the Rochester sample (Thornberry, 1998).

The amount of violent behavior displayed by youths is related to gang participation. Thornberry, Krohn, Lizotte, & Chard-Wierschem (1993) found that Rochester gang members had higher rates of person offenses when they were active gang members, but that the rates of person offenses dropped off when boys left the gang. Esbensen and Huizinga (1993) also reported highest rates of delinquent behavior during Denver youths' years of gang membership, and Hill et al. (1996) found similar results in a Seattle sample. Thornberry (1998) summarized data from the Denver, Seattle, and Rochester studies along with data from a three city gang study by Fagan (1990a) showing that gang members accounted for a greatly disproportionate share of delinquency of all kinds (see also Thornberry & Burch, 1997).

Writers on gangs often emphasize the role of economic problems and social disorganization in the development and persistence of gangs. Immigrant youths in Chicago described by Thrasher (1927) and Chicano youths in Los Angeles lived in communities experiencing family and social stressors. For gangs to develop, according to J. W. Moore (1998), "conventional agencies of socialization – families and schools – must be ineffective and alienating, which means that conventional adult supervision is largely irrelevant" and "there must be limited access to appealing conventional career lines – also known as good adult jobs" (p. 67). As Fagan (1996) put it in describing the historical emergence of gangs, "Wherever neighborhoods in large cities were in transition, gangs emerged" (p. 40). Both Fagan (1996) and Hagedorn (1998) linked more contemporary changes in neighborhoods and communities with the development of gangs in cities that previously were gang free and with increased involvement in illegal drug markets and increased lethality of gang related conflict.

Less emphasized is that the *individuals* who become involved in gangs tend to be distinguished from other youths by a set of personal characteristics that distinguish youths who engage in more delinquent behavior in general from youths who engage in less delinquent behavior. Thornberry (1998) summarized results from studies of youth development in Rochester and Seattle showing that low attachment and commitment to school, school antisocial behavior, low achievement, poor grades, association with delinquent peers, little belief in conventional rules, and positive attitudes towards drugs were associated with the probability of joining a gang. These risk factors resemble predictors of general delinquency, violence, or serious delinquency (Farrington, 1998; Hawkins, et al., 1998; Lipsey & Derzon, 1998), which have been more extensively studied than has gang participation.

Finally, gang development and gang involvement is a *social* phenomenon. Certain conditions – social disorganization, a population of poorly socialized youths, and group diversity – make the development of gangs in a community more likely much as fertile soil and plenty of water foster the development of agricultural crops. But gangs do not develop and persist everywhere these conditions are found. In some places groups form and come to define themselves in a special way in relation to other groups in the community. These definitions often seem to relate to status, defense against other groups, or retaliation. These *group self-definitions* seem to be much like an infectious agent that promotes gang propagation.[5] The stylistic manifestations that often go along with gang identification (special clothing, markings or tatoos, symbols) are fallible indicators of pernicious group self-definition. It is not the social contagion of the stylistic manifestations that propagates delinquent street gangs (despite the great attention that some police agencies give to these signs), instead is the contagion or spontaneous generation of the special social definition that is pernicious. Put another way, wearing a "do rag" and marking objects or places with symbols does not represent a gang problem, but youths identifying with a gang that defines itself as in conflict with another group does represent a gang problem.

The role of *threat* ("the potential for transgressions against or physical harm to the gang, represented by the acts or presence of a rival group," p. 244) in defining and increasing the cohesion of gangs has been described by Decker (1996), building on the work of Klein (1971), Hagedorn (1988), Padilla (1992), and Vigil (1988). Shared beliefs about threats fosters beliefs that protection comes from gang cohesion and the preparation for violence. Evidently some gang members join gangs because of fear of violence (Padilla, 1992), and this fear of violence leads to participation in the instigation of violence against sources of perceived threat. The process described by Decker (1996) is reminiscent of the accentuation of deviance among increasingly isolated subpopulations in Wilkins' (1965) theory of social deviance.

---

[5] See Loftin's (1986) interesting account of gun-related violence as a contagious social process for a related argument.

## 2. Schools and Gang Prevention or Intervention

It is natural to consider schools as a locus for intervention to prevent or reduce gang involvement for three reasons.

First, the school is the main secular institution aside from the family involved with the socialization of the young. Not only do young people spend a great deal of time in school, but until the ages at which chronic truancy and dropout become problems nearly all young people are actively enrolled in school. The school therefore is in a better position than any institution other than the family to influence the behavior of young people. To the extent to which schools provide successful instruction in social competencies and develop attitudes and beliefs that are not conducive to problem behavior or involvement with gangs, gang involvement may be reduced.

Second, school performance and attitudes are robust predictors of gang involvement, delinquent behavior, and other forms of problem behavior. Young people who do not like school, whose school performance is poor, and who are not committed to education are more likely to engage in a variety of problem behavior – and they are more likely than other youths to become involved with gangs. Preventive interventions in school that keep youths attached to school, committed to education, achieving, and attending school may thereby reduce the likelihood of gang participation.

Third, explanations of the development of youth gangs often involve the disorganization or ineffectiveness of social institutions including the school. Schools that are ineffective in providing environments in which everyone feels safe or that fail to generate consensus about socialized normative behavior may create the conditions in which gangs can develop.[6]

The ambitious "Spergel model" to reduce gang violence through a hybrid of prevention, intervention, and suppression (Spergel, 1990) emphasizes mobilizing communities to improve their safety, utilize environmental design techniques to enhance guardianship, and take other steps. A critical element in the model is a special focus on providing safe, gang-free schools by involving key individuals in and out of the school to improve guardianship. Spergel's approach suggests organizing the community to bring about development among groups and organizations to address community problems. Schools are among the community agencies with potential to be involved in community organization.

---

[6] In the final chapter and with the benefit of knowledge of the results of the present inquiry, we give more emphasis to the role of safety.

## Types of School-Based Programs

The range of activities schools could pursue to prevent or reduce gang involvement and other forms of problem behavior is broad. The remainder of this chapter introduces a typology (or classification) of school-based approaches to problem behavior that was used to guide inquiry on what schools now do to prevent or reduce gang involvement. Details of the taxonomy and its development are provided elsewhere (G. D. Gottfredson et al., 2000). Here we organize the classification into three superordinate classes: (a) direct services to students or families, (b) organizational or environmental arrangements, and (c) discipline or safety management activities.

### Direct Services to Students or Families

#### Information

The first potential kind of intervention involves providing information about problem behavior, gangs, drugs, mental health, health, and services or resources available. This includes information directed to students, parents, educators, or community members. For example, the provision of information to parents or educators about gang indicia would fall in this category. The provision of information is a part of most gang and other problem prevention programs. Crime prevention programs that provide information about the conditions under which crime occurs so that citizens can take steps to limit their exposure to risk remain common. Stephens (1993) has described a *Gang Assessment Tool* — a questionnaire intended to inform local school and community members about the signs of gang problems and to identify a problem when there is one. The tool calls attention to graffiti and crossed-out graffiti, for example. Other information interventions involve parent notification (Stephens, 1993).

#### Prevention Curriculum, Instruction, or Training

These interventions provide instruction to students to teach them factual information, increase their awareness of social influences to engage in misbehavior, expand their repertoires for recognizing and appropriately responding to risky or potentially harmful situations, increase their appreciation for diversity in society, improve their moral character, etc. These programs sometimes involve a classroom format, and teacher lectures, demonstrations, and class discussion, but they may also be delivered in small groups or to individuals. Use may be made of audiovisual materials, worksheets or workbooks, textbooks, handouts, and the like. Instruction may be very brief (less than an hour) or extended (requiring multiple years).

An important technology for developing and delivering training is the use of *cognitive-behavioral* or behavioral modeling methods of training or instruction. Cognitive-behavioral and behavioral modeling methods involve conveying vocabulary, modeling or demonstrating, and providing rehearsal and coaching in the display of skills. For example, students are taught to recognize the physiological cues experienced in risky situations. They rehearse this skill and practice stopping rather than acting impulsively in such situations. Similarly, youths are taught and rehearsed in such skills as suggesting alternative activities when peers propose engaging in a risky activity. And they are taught to use prompts or cues to remember to engage in desired behavior.

"Social competency," "cognitive-behavioral" (Hollin, 1993), or "interpersonal skills training" (Goldstein, 1993) interventions are directed at self-restraint. Social competence programs involve developing youths' skills in identifying the antecedents of problems in the cues they perceive from others, their environment, and their own state of arousal; improving youths' capacity to process information with reference to the desirability of alternative outcomes; and establishing behavioral repertoires for avoiding potentially harmful situations. Some of these programs involve parent training to help them teach cognitive behavioral self-management to their children (e.g., the Spivak, Platt, & Shure, 1976, Interpersonal Cognitive Problem Solving or Camp and Bash's, 1985, Think Aloud program); others are administered by teachers (e.g., Botvin's, 1989, Life Skill Training or the Weissberg, Caplan, Bennetto, & Jackson, 1990, Social Problem Solving Program; see Elias et al., 1994, and Baron & Brown, 1991.) In some approaches, groups of individuals with specific interpersonal skill deficiencies are composed, and the skills needed are taught using modeling, role-playing, feedback on performance, and activities to maintain training effects (Goldstein, 1993).

Evaluation research has demonstrated that social competency promotion programs can have modest, short-term effects on reducing a variety of problem behaviors (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995; Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990; Caplan et al., 1992; Elias & Clabby, 1989; Hamburg, 1990; Shure & Spivack, 1979, 1982; Weissberg & Elias, 1993) and can be adapted for implementation in different places and populations (Elias & Clabby, 1992; G. D. Gottfredson, Jones, & Gore, in press). Furthermore, effects appear to be larger when programs are delivered in stronger form (Weissberg, Gullotta, Hampton, Ryan, & Adams, 1997) or involve "boosters" (additional instruction at a later time). Social competency promotion programs can be applied to the general population or to a targeted subpopulation of high-risk individuals.

The 9-lesson Gang Resistance Education and Training (G.R.E.A.T.; Esbensen & Osgood, 1999; Esbensen, Osgood, Taylor, Peterson, & Freng, in press; Sellers, Taylor, & Esbensen, 1998), the 12-lesson instructional component of the Broader Urban Involvement and Leadership Development (BUILD) Project (Thompson & Jason, 1988), and Hawaii's 8-unit Positive Alternative Gang Education (Mayeda & Okamoto, 1999) which are specifically directed at preventing gang participation fall in the present category, but they are relatively low in intensity compared to some other interventions in the category.

### Behavioral or Behavior Modification Interventions

Behavioral interventions involve tracking of specific behaviors over time, behavioral goals, and uses feedback or positive or negative reinforcement to change behavior. Behavior is responded to with rewards or punishments when the behavior occurs.[7] This category includes individual behavioral or behavior modification programs (e.g., programs in which the behavior of an individual is monitored and reinforced). Token systems in which individuals earn tokens for meeting specified goals are in this category. Behavioral interventions include individual behavior plans, individual education plans, home-based backup reinforcement programs, group or classroom based behavior modification programs.

A well developed technology exists for intervening with individual youths who display impulsive, aggressive, or conduct disordered behavior (Kazdin, 1987). Schools can also involve parents in behavior management, including home-based backup reinforcement for school behavior (Atkeson & Forehand, 1979; Barth, 1979). The program of monitoring and reinforcement of attendance, academic progress, and school conduct evaluated by Bry (1982) is an example of a small-scale behavioral program with evidence of beneficial effects on delinquent behavior and drug use. The larger-scale studies described by Mayer and Butterworth (1979) and Mayer, Butterworth, Nafpaktitis, and Sulzer-Azaroff (1983) which also showed reductions in problem behavior are examples of behavioral programs combined with improvements to instruction.

### Other Counseling, Social Work, Psychological or Therapeutic Interventions

Schools often implement some form of counseling or social work intervention. This may include individual intervention such as counseling, drug treatment, case management, crisis intervention; and it may include group intervention such as group counseling or drug treatment, or peer group counseling. Counseling or psychological interventions that are mainly cognitive-behavioral or behavioral would fall in earlier categories. The present category is intended to include assessment, planning, advice, therapy, case management, or consultation of other kinds.

This category involves the provision of advice or guidance – or the encouragement of communication, insight, and understanding – to remedy or prevent mental health or behavioral problems or to promote healthy development. Counseling, social work, psychological or therapeutic interventions use identifiable techniques of psychology, counseling or social work. The activity may be conducted with individuals or with groups.

Counseling may involve educational, vocational, or interpersonal guidance or advice to individuals or groups. It may involve collecting, organizing, or analyzing information about individuals based on records, tests, interviews, or other sources to assess interests, abilities, and personality for educational, vocational, and social relations planning. It may involve assisting individuals to understand and overcome social and emotional problems or to succeed at educational, vocational or social tasks. (This description is adapted from Employment and Training Administration, 1991.) In schools, "counseling" is often an organizational response to student misconduct and may involve the application or recommendation of disciplinary responses to student behavior.

---

[7] Other uses of rewards and punishments (e.g., suspension, detention) are included in two other categories: classroom management and school discipline practices.

Although some form of counseling or therapy is a common component of gang intervention programs (Klein, 1995) and although most schools have counselors, the empirical record of school-based counseling in demonstrably reducing problem behavior is weak (D. C. Gottfredson, 2001). Even well thought out and well practiced group counseling interventions for delinquent youths may have negative effects (Dishion, McCord, & Poulin, 1999; G. D. Gottfredson, 1987) if they group youths displaying problem behavior together.

Like counseling, case management is often defined vaguely or undefined. An unusually clear definition was articulated by the Joint Commission on the Accreditation of Hospitals (1979, cited by Ridgely & Willenbring, 1992, p. 17):

> (1) assessment: determining an individual's current and potential strengths, weaknesses, and needs; (2) planning: developing a specific service plan for each individual, with provisions for day, evening, and night linkages to needed functions; (3) linking: referring or transferring individuals to all required services in the formal and informal caregiving systems; (4) monitoring: continuous evaluation of individual progress; and (5) advocacy: interceding on behalf of an individual to ensure equity, both in the specific case and for any larger group or class to which the individual might belong.

Ridgely and Willenbring add identification and outreach (i.e., attempts to reach and enroll persons in need of services but who are not availing themselves of them) to these five elements. Case management is derived from traditional social casework functions in social work. Case management has been shown to be useful connecting persons in need of services with those services. For example, Bokos, Mejta, Mickenberg, and Monks (1992) describe a case management study involving intravenous drug users that succeeded in enrolling case-managed clients in drug treatment and reducing delays in entering treatment compared to control group clients.

This category also includes crisis intervention, "hotlines," and victim counseling.

**Other Individual Attention Interventions**

Tutoring or other individualized assistance with academic tasks (by adults, older students, or peers), mentoring (one-on-one interaction with an older, more experienced person to provide advice or assistance other than with academic tasks), coaching (demonstration, prompting, reinforcement, and direction by a person with greater skill, knowledge, or experience in an area other than academic tasks), job apprenticeship or placement, or promise of eventual monetary or other incentive for maintaining good performance (e.g., promise of college tuition in exchange for good grades) made *to an individual* are classified as *other individual attention interventions*. By definition these are one-on-one exchanges with individual youths, and they exclude interventions classified and described above. Mentors have been employed in school programs to provide positive role models and prosocial adults to whom youths may become attached (e.g., D. C. Gottfredson et al., 1996). An unusually well implemented and intensive mentoring program in which carefully screened, trained, and matched mentors met 3 or 4 times a month for a year with youths reduced onset of illegal drug or alcohol use, aggression, and truancy in one evaluation (Grossman & Tierney, 1998).

One-on-one tutoring has been shown to be highly effective in improving reading skills of children (Wasik & Slavin, 1994), particularly when implemented by highly trained teachers using systematic procedures for instruction. Experience implies that the "tutoring" and "mentoring" programs that are more often seen in schools usually lack the intensity of programs which have been shown to be effective in research, however.

### Recreation, Enrichment, or Leisure Activities

Recreation, enrichment, or leisure activities involve the provision of or access to activity, play, amusement, or diversion; exploration of locations or events outside of the school and that are outside of the school's curriculum; activity that provides fun or relaxation. The activities in this category are not intended as a reward for behavior or primarily offered as a response to student conduct. Included are non-contingent recreation or sports activity, field trips, clubs, wilderness or challenge activities, arts and crafts. Recreational or enrichment activities have often been included as components in gang intervention programs (Klein, 1995) and they are often included in school-based delinquency prevention programs as well.

Recreation programs (Lovell & Pope, 1993) include regular after-school recreation programs with or without an instructional component, police athletic leagues, safe haven programs, Boys and Girls Clubs, and late night recreation programs. Programs to employ youths during the summertime are also generally intended to provide constructive activity. Sometimes these purely recreational or employment programs are combined with program elements of another program type, which increases their plausibility and delinquency prevention potential. A Boys and Girls Club Targeted Outreach Project (Boys and Girls Clubs, 1993; Bureau of Justice Assistance, 1995; OJJDP, 1991; Feyerherm, Pope & Lovell, 1992), sponsored by OJJDP seeks to specifically include gang members in its programs as an approach to prevention and intervention.

Despite the popularity of recreational and enrichment activities, the theoretical and empirical rationale for these activities is weak when they are used alone to reduce problem behavior or prevent gang participation or the development of gangs. Lovell and Pope (1993) citing a report from a Milwaukee Public Policy Forum, include as pertinent recreational activities those that "are expressly intended to be developmentally significant and therefore appropriate in the context of prevention or intervention efforts" (p. 322). They include sports, performing arts, camping, wilderness and conditioning programs, drop-in center activities, and many other social activities. We know of no convincing evidence that school-based recreational programs reduce any form of problem behavior, and measures of youth involvement in extracurricular activities is not among the robust predictors of violent behavior or gang membership (Farrington, 1998; Thornberry, 1998). Such activities may have usefulness as an adjunct in programs emphasizing another form of intervention – perhaps to encourage program participation or reduce attrition – however.

### Referral to Other Agencies or for Services

Referral of students or students' families to other agencies or for services provided outside of the school is another category of direct interventions schools may undertake to prevent or reduce gang participation or other forms of problem behavior.

### Services or Programs for Family Members

This category of prevention or intervention activity involves outreach or the provision of services to families to improve their child management and supervision practices, or to provide other family services. Included are instruction for parents or guardians in child behavior management (Dishion and Andrews, 1995); behavioral intervention to reduce coercive family process (Kazdin, 1987; Reid & Patterson, 1991); family therapy or counseling (e.g., Functional Family Therapy; Alexander & Parsons, 1973; Alexander, Pugh, & Parsons, 1998); and brief interventions with families for problem identification, resolution, or referral. Also included are activities that approach the family to gain cooperation in managing school-related youth behavior, family case management, and other activity directed at child management and supervision. *Not included* is the use of home-based reinforcement for in-school behavior (which is included in the category of behavioral interventions). Programs of parent meetings in which parents network or share solutions to problems are included, as are alcohol or other drug treatments for family members, and home inspections.

## Organizational or Environmental Arrangements

Another superordinate class subsumes interventions that change or maintain organizational or environmental arrangements rather than direct services or program activities at individuals or their families. Organizational arrangements may be important in gang prevention and intervention because such arrangements are key parts of the way order and social control are established and maintained in schools. These organizational or environmental arrangements include the following types of activity.

### Improvements to Instructional Practices

Activities applied to entire classrooms that involve the adoption or expansion of improved teaching practices fall in the first category of organizational or environmental arrangements. These also include training, supervision, or assistance to foster improved instructional methods. Activities to improve instruction include the following if applied in order to prevent problem behavior: cooperative, mastery, "active," or "experiential" teaching techniques; individualized instruction, peer teachers/leaders; adult instructors of a given race or sex; use of other instructional strategies to increase school or classroom orderliness; computerized or programmed instruction; class discussions or lectures; individual seat work; behavioral modeling; role playing; rehearsal and practice of skills; and use of cues to prompt behavior or recall. *Not* included are changes in curriculum (the first category above) or in classroom management techniques (the next category below).

Prevention programs have included use of cooperative learning techniques (Johnson & Johnson, 1989; Slavin et al., 1990) to increase rewarding academic experiences and liking for school – with the rationale that attachment to school is among the predictors of delinquent and violent behavior and gang membership (Farrington, 1998; Thornberry, 1998). Other programs, involving scholastic goal-setting and incentives for improved performance (Mac Iver, 1993), potentially fall in this category because poor school performance is among the predictors of violent behavior and gang membership. The Multimodal School-Based Prevention Demonstration (D. C. Gottfredson, Gottfredson & Skroban, 1996, 1998; Skroban, Gottfredson, & Gottfredson, 1999) incorporated cooperative learning strategies along with other strategies to reduce problem behavior in a middle school population based on the rationale that if it increased attachment and achievement it may reduce problem behavior, but the program mainly illustrated the importance of improving the school as a whole as the researchers deemed the interventions insufficiently implemented to produce measured effects on delinquency.

### Improvements in Classroom Organization and Management Practices

This category of intervention includes activities applied to entire classes that involve the adoption or expansion of improved methods of managing classroom behavior, transitions, use of time, and grouping. *Not included* are changes in curriculum, instructional techniques, or the use of external resources for instruction (which are included in other categories). Activities to improve classroom organization and management may include any of the following if aplied in order to prevent problem behavior: (a) activities to establish and enforce classroom rules, (b) improved use of rewards and punishments, (c) improved management of time, and (d) changes in the grouping of students by ability, achievement or effort *within the classroom.*

A logical extension of effective behavioral methods applied to individuals is their application in classrooms and schools. Research on classroom management documents effective practices (Brophy, 1983; Doyle, 1986; Emmer & Aussiker, 1989; Evertson & Harris, 1992; D. C. Gottfredson, 1992). A Baltimore prevention program implemented classroom management improvements (assertive discipline and reality therapy) along with cooperative learning in the context of a more general organization development approach (Program Development Evaluation, PDE; G. D. Gottfredson, 1984) with reductions in students' self-reported delinquent behavior and improvements in classroom orderliness according to teacher reports, and fewer suspensions along with other improvements in school climate (D. C. Gottfredson, 1988; G. D. Gottfredson & Gottfredson, 1987).

An intervention to improve classroom management was implemented in a number of Charleston (SC) middle schools (D. C. Gottfredson, Karweit, & Gottfredson, 1989; D. C. Gottfredson, Gottfredson, & Hybl, 1993). In this case, the classroom management program was combined with a program of school-wide discipline policy and practice review and revision, a behavior tracking system to record student behavior and notify parents of in-school behavior (good and bad), and training of teachers and administrators in behavior modification techniques all in the context of an overall program development (PDE) approach. Classroom orderliness increased, teachers' ratings of students' disruptive behavior went down, and ratings of on-task behavior went up.

### Activity to Change or Maintain the Culture or Climate of the School, Alter or Maintain Expectations for Student Behavior, or Secure Commitment to Norms

Included in this category are school-wide (a) efforts to establish, encourage or sustain a special school climate or culture through symbols, ceremonies, or systematic procedures, (b) communicate expectations, and (c) use social influence or attitude change techniques to obtain commitment to norms.

Efforts to establish, encourage, or sustain special school climate or culture might include any of the following:

- A structured or regimented style of school climate or culture (e.g., demanding physical regimen, student work assignments or details, highly structured use of time or military-style arrangements).

- A culture or climate emphasizing peaceful and civil interpersonal exchange (e.g., school-wide use of symbols or language signaling desired behavior for others to emulate, social recognition of conduct congruent with cultural expectations, and use of events or ceremonies to publicly recognize valued behavior or expression).

- Other activities to alter or sustain school climate (e.g., school pride campaigns).

Communication of expectations might occur through any of the following mechanisms:

- Written, video, or audio communications such as bulletins, posters, pamphlets, or announcements.

- Training or description of problem behavior and situations.

- Assemblies or special events (such as concerts, plays, skits, conferences, puppet shows).

- Distribution of tokens, mugs, tee-shirts, ribbons, or other means of disseminating messages.

Use of social influence or attitude change techniques to obtain commitment to norms may include:

- Peer group discussions.

- Obtaining public commitments (e.g., students declaring their intentions to stay drug free in ceremonies, daily recitation of a pledge or commitment).

- Provision of accurate information about the beliefs or practices of other students.

- Mobilization or direction of youths' behavior through special clubs (e.g., anti-violence or anti-drug clubs).

An example of a school that maintains a special culture as a means of shaping school behavior is the Piney Woods Country Life School in Mississippi. The school occupies 2,000 relatively isolated acres. School President Dr. Charles Beady described the school this way to the Minneapolis Star Tribune ("A School With 2 R's,"1998), "We're Christian-oriented. It's critical to what we do. We believe that a strong moral foundation is essential to training future leaders. And we exploit it to the max. . . . We tell [the students] where to be, when they're supposed to be there. . . . We're strict and disciplined. And a lot of teenagers are not used to that world." According to the Star Tribune:

> At Piney Woods, 300 students in grades 7-12 attend prayer services every morning, and they're forced to study for two hours every night. If they drink, use drugs or have inappropriate sex, they can be expelled. They're required to make their beds, hospital-style. Boys wear regulation haircuts and no earrings. All students must maintain at least a "C" average and work 10 hours a week to help pay their tuition. Most stay for an average of three years and, when they graduate, nearly all go on to college.

Mahmoud, a 15-year old student quoted by the Star Tribune described the school's special cachet this way: "It's more peaceful here. At Franklin [middle school in Minneapolis], we had students who brought knives and stuff there. People would beat up the teachers and stuff like that." [At Piney Woods there is] "nothing of the sort." According to the Star Tribune:

> Wearing his Junior ROTC uniform, Mahmoud is a picture of cleanliness, neatness and good manners, things that are drilled into the students. When you ask him questions, he responds with a crisp, "Yes, sir," just as he's told to do by teachers and

> administrators. He's familiar with the paddle. "I got it five times," he said, reciting the offenses: horseplay, tardiness and being out of uniform. "Here, you don't want to get into trouble. You better respect the teachers and the adults and stuff."

An additional example of a school climate approach to the prevention of problem behavior is the PeaceBuilders program (Embry, Flannery, Vazsonyi, Powell, & Atha, 1996). This is an elementary grades school-wide violence prevention program in which students, teachers, and administrators are taught a common language and provided models of positive behavior, cues to signal desired behavior, and opportunities for rehearsal of positive behavior and rewards for displaying it.

### Intergroup Relations and Interaction Between the School and Community – or Groups Within the School

This category includes activity to (a) promote interaction among members of diverse groups and to celebrate diversity, (b) promote relations between the school and the community, and (c) improve relations and resolve or reduce conflict. Activities ranging from involving disparate individuals in common pursuits (e.g., multicultural clubs); to use of procedures to increase communication and cooperation between school staff and parents; to mobilization of community resources (assembling, marshaling or coordinating community members or resources); to activities in which members of different groups confront problems and attempt to resolve differences; to the deployment of an ombudsperson; and to interagency cooperation (e.g., cooperation of the school with a juvenile and family court, or sharing of information with a police agency).

### Use of External Personnel Resources

This category includes arrangements that extend personnel for instruction-related activities or for consultation *in the classroom.* Any of the following are included if used to prevent problem behavior or improve school order: parent or community member volunteers, authority figures such as police officers, professional consultants (e.g., psychologists), classroom aides, and older students from another school or college.

### Interventions That Involve a School Planning Structure or Process – Or the Management of Change

This class of interventions includes participation of students, faculty, administrators, or others in planning. It *does not* include student participation in managing discipline (which is described below among discipline and safety management activities).

One subtype of planning interventions involves the use of methods or processes for planning or program development. Examples are the use of (a) school planning teams or groups, (b) a planning structure (e.g., needs assessment, analysis of obstacles, selecting what to do, making action plans), and (c) use of information feedback in formal planning for school improvement (e.g., needs assessments or school climate surveys or school crime analysis). Project PATHE (D. C. Gottfredson, 1986), the Baltimore City Effective Schools Project (D. C. Gottfredson, 1988; G. D. Gottfredson & Gottfredson, 1987), and Project BASIS (D. C. Gottfredson, Gottfredson, & Hybl, 1993) are all examples of the application of a Program Development and Evaluation planning structure and process (G. D. Gottfredson, 1984) combined with school surveys and data feedback to facilitate planning for change. An additional example of the application of a planning process to promote school safety is illustrated by the California Department of Education's (1998, Chapter 3) action guide for designing programs. Stephens (1994) provided an overview of another approach to planning focused on school safety and violence prevention.

A second subtype of planning interventions involves the inclusion of a broad range of individuals or perspectives in planning. Some of these interventions include persons from outside the school in school decision making or supervision of students (e.g., the Comer process [Cook et al., 1999; Cook, Murphy, & Hunt, 2000] and state or district requirements to involve parents or community members in developing plans). Other interventions involve arrangements to involve students in school planning or decision making. For instance, a student group or club identifies problems or issues to discuss with the school administration or a youth planning structure is used. Excellent youth planning manuals have been developed by Bennett (1987) and Sundlee and Stapp (1979), and a useful but more scattershot planning guide by Lewis (1998) is more widely available.

A third subtype of planning structure or process is school consultation. In such interventions, schools receive professional advice on school practices or to solve school-wide problems. For example, a psychiatrist may act as a consultant helping a school identify and solve problems (Bostic & Rauch, 1999). Or, a behavioral consultant may help teachers and administrators identify the contributions of social structures and peer relations to interpersonal conflict in a school to design interventions to reduce aggression and disruptive behavior (Farmer, 2000).

## Discipline or Safety Management Activities

A third superordinate class of prevention activities involves (a) security or surveillance and (b) youth roles in regulating or responding to student conduct.

### Security and Surveillance Activity

This category includes procedures or arrangements to make it difficult for intruders to enter the school by guarding or securing entrances and exits; using people or technology to watch entrances, hallways, grounds and other places for problems; or making the reporting of problems easier. It includes arrangements to exclude weapons or contraband. Among the procedures or arrangements used by schools are (a) identification cards or badges; (b) school security personnel or police in the school; (c) visitor's passes or visitor check in; (d) locking exterior doors; (e) closed circuit television; (f) physical surveillance or patrolling of halls, grounds, and other places; (g) confidential ways to report crimes, problem behavior, or potential problems; (h) intervention in potential disputes or actions to prevent escalation; (i) drug testing; (j) drug, gun, or bomb sniffing dogs; (k) removing locker or restroom doors; (l) metal detectors; and (m) locker searches.

As is true in all other categories in our classification of prevention or intervention activities, practices are included whether they are known to be effective or known to be largely ineffective. Activities are included if schools undertake them (or attempt to do so) to prevent or reduce problem behavior or promote a safe and orderly environment.

Many of the arrangements in the present category are disparaged by observers because they are so often obviously poorly implemented. A casual tour of some urban schools will reveal doorway metal detectors that are unplugged or that students walk around. Schools issue identification badges, but their use is abandoned when many students misplace them. Visitor check in is "required" but ignored in many schools. Closed circuit television screens go unwatched, and so on. Some schools engage in foolish security activities. One of the most spectacular of these is the use of hand-held metal detectors to do random checks of students in the school. This is foolish because the check could turn up a student with a loaded weapon – which would be a very dangerous situation. The point of using metal detectors should be to keep weapons out of the school, which would happen if *everyone* knew that they would have to pass through an inspection on the way into the school. The last thing a school should want to do is find weapons in the school by random checks with a hand-held metal detector.

When security procedures are flawed, it is relatively easy for everyone to see the flaw. This is less true of interventions in the other categories. Most lay observers (and alas many professional educators) have more difficulty in seeing the flaws in the implementation of instructional, classroom management, counseling, and other interventions. Nevertheless they are just as likely to be flawed as are security arrangements. Systematic inquiry into the quality of implementation is, of course, the main point of the present inquiry. No category of prevention or intervention activity is excluded a priori simply because it is not often done well.

### Youth Regulation of and Response to Student Conduct

This category of prevention and intervention activity involves formal roles in the school for students in formulating the school's rules or in anticipating or responding to problem behavior. Among the activities are programs for dispute resolution including peer mediation (e.g., Olen, 1992; Schrumpf, Crawford, & Bodine, 1997) or other student conflict interventions, student courts, and student discipline deputies. Peer mediation programs may involve training for students and adults in the school, but to fall in this category they must involve youths in identifying and mediating conflicts in the school after the training. Curriculum or instruction intended to increase students' conflict resolution skills and that does not lead to the establishment of a system for involving students in mediation or adjudication of disputes falls in the category of prevention curriculum or instruction.

### Other Kinds of Prevention Arrangements and Activities in Schools

The kinds of prevention and intervention activity described above may be called "discretionary" activities in the sense that schools may choose to pursue them – or they may not. Additional steps taken by schools to prevent or reduce problem behavior are not really discretionary – they are present in all schools. These include school-wide rules and disciplinary practices, the ways students are grouped for instruction, the way the physical plant is arranged and so forth. Elsewhere (G. D. Gottfredson et al., 2000) we have provided some information about these other kinds of activities and arrangements. They are not the focus of the present report.

# 3. The Research Questions

The present report summarizes the results of inquiry to address questions in three broad areas: (1) questions about the extent and nature of gang participation among the nation's secondary school students, (2) questions about schools experiencing gang problems, and (3) questions about school gang prevention or intervention activity. Subsidiary research questions about the validity of reports about gang problems and gang participation are also addressed. In this section we introduce the questions the research is intended to answer.

## Questions About Gang Participation

Several research questions pertain to individual involvement in gangs.

1. How common is gang participation among secondary (middle and high school) students in the United States? Basic descriptive data on the extent of gang participation from national samples are heretofore unavailable.

2. What students are involved in gang activity? What are the characteristics of gang participants? What individual characteristics predict participation?

3. What is the relation between gang participation and other problem behaviors and personal victimization? In the first chapter we reviewed earlier studies showing that young people involved in gangs also engage in a disproportionate amount of crime. This issue is explored in the present study at well. We examine the relation between gang involvement and delinquent behavior, carrying weapons, victimization, and fear. And we examine the predictors of gang involvement, and especially the incremental validity of fear for one's safety in predicting gang involvement.

## Questions About Schools and Gang Problems

Other questions pertain to *schools* rather than individuals.

1. How many schools have problems with gangs?

2. What are the characteristics of schools with gang problems?

3. What explains the rate of student gang involvement observed in a school? We examine a statistical model of school gang participation rates with special attention to the role of school safety.

## Questions About School Programs

A final set of questions pertain to school programs.

1. How much school-based gang prevention and intervention activity takes place? What do schools do to prevent or reduce gang involvement?
2. What is the quality of school-based gang prevention and intervention programs?
3. Are students who participate in gangs more or less likely to be exposed to preventive interventions?

## Subsidiary Questions

In the conduct of the research it was also necessary to pursue subsidiary questions about the validity of reports of gang involvement. First, we conducted explorations of the possibility that some students fail to take questionnaire surveys seriously and misrepresent themselves as gang participants. We asked how much our estimates of gang participation would be reduced if only students who – on the basis of other evidence – appear to be making truthful responses are included in tabulations. Second, we explored the validity of school principals' reports of gang problems. We asked how well principal reports converge with other information.

The next chapter provides a description of our research methods.

# 4. Methods

The Study of Gang Prevention and Intervention builds on a large scale National Study of Delinquency Prevention in Schools (G. D. Gottfredson et al., 2000) sponsored by the National Institute of Justice. It makes use of a national sample of schools and the activities they are undertaking to prevent problem behavior and promote safe and orderly school environments.[8]

## Overview

To begin the study of what schools are doing, we sought to develop a comprehensive understanding of the range of prevention activities recommended by national organizations, technical assistance providers, resource guides and the like. We supplemented information from these sources with information from our experience and files of school-based programs to prevent problem behavior. The result of this discovery phase were descriptions of a large number and variety of activities (Womer, 1997). From these descriptions, we developed a taxonomy or classification of school-based prevention activities (G. D. Gottfredson & Gottfredson, 1997; reproduced as Appendix D in G. D. Gottfredson et al., 2000). For example, there was a large class of curricular, instructional or training interventions. There was a category of counseling, psychological, social work, or therapeutic activities. Planning activities were classified separately, as were architectural arrangements to reduce problem behavior, for example. This taxonomy is the basis for the description of types of prevention and intervention activity described in the second chapter.

Our next step was to ask principals in a probability sample of 1287 schools what they were doing in their schools to prevent problem behavior or to promote a safe and orderly school environment using the taxonomy to structure the questions. That is, we asked if there were any instructional activities directed at reducing problem behavior or promoting a safe school, if there were behavioral interventions, counseling, and so on for all of the categories in our taxonomy. We asked principals to name the activities and to provide the names of individuals in the school who could describe the activities further. We were successful in getting responses from 848 schools (66%). Principals reported a surprisingly large number of prevention and intervention activities, which we used as a basis for sampling school-based programs for more detailed scrutiny in a subsequent phase.

In a second phase, we sought information in detailed questionnaires for school prevention and intervention activity in 14 of the 22 categories of our taxonomy. Activity questionnaires were used to obtain detailed descriptions of the nature, level, and quality of implementation of specific prevention and intervention activities. We obtained information about 3,700 activities from knowledgeable persons (whom we call "activity coordinators" for short) in over 550 schools. In the second phase we also asked principals to provide information about school-wide activities in the remaining 8 categories of our taxonomy, to report on the extent of crimes in the school, whether the school has problems with gangs, and on other features of the school. We obtained responses from 635 principals. We sought school cooperation with surveys of students and teachers to obtain reports of problem behavior and participation in prevention or intervention programs, and obtained useful survey data from over 16,000 students in 310 schools and over 13,100 teachers in 403 schools.

---

[8] This description of research methods draws on the account by G. D. Gottfredson et al., 2000 (which provides more details) and on an earlier brief report by G. D. Gottfredson, 1999b).

## Sampling

### Schools and Principals

We desired to describe *schools* in the United States, and to provide descriptions for urban, suburban, and rural schools and for elementary, middle, and high schools. We required a list as inclusive of the population of schools in the U.S. as possible from which to sample. We used a commercial mailing list vendor's list because it included not only public but also private and Catholic schools, was purged of recently closed schools by the mailing list vendor, and contained schools that began operation more recently than the most comprehensive alternative lists that could be located. The vendor, Market Data Retrieval (MDR), uses information from the Common Core of Data developed by the National Center for Education Statistics, and it updates and augments that information with additional information which it develops–such as principal's name.

We assumed that a 70% participation rate might be attainable, and that it would be desirable to have 300 participating schools representing each of urban, suburban, and rural schools and 300 schools representing each grade level. The universe was stratified by location and level, and a systematic 1/*n* sample of 1287 schools was drawn so that the number of sampled schools in each of the nine (level by location) cells sampled was 143. With a 70% participation rate this would produce 100 schools per cell, 300 at each level, and 300 for each location. School level was defined as follows (E = elementary, M = middle, H = high):

| | Highest grade | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lowest grade | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Pre-K | E | E | E | E | E | E | E | E | M | M | H | H |
| K | E | E | E | E | E | E | E | E | M | M | H | H |
| 1 | E | E | E | E | E | E | E | E | M | M | H | H |
| 2 | | E | E | E | E | E | E | E | M | M | H | H |
| 3 | | | E | E | E | E | E | E | M | M | H | H |
| 4 | | | | E | E | E | M | M | M | M | H | H |
| 5 | | | | | E | E | M | M | M | M | H | H |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 | E | M | M | M | M | H | H |
| 7 | | M | M | M | M | H | H |
| 8 | | | M | M | H | H | H |
| 9 | | | | M | H | H | H |
| 10 | | | | | H | H | H |
| 11 | | | | | | H | H |
| 12 | | | | | | | H |

The stratified probability sample includes public and private schools in the United States (all 50 states and the District of Columbia), excluding Puerto Rico and U.S. territories. The sampling frame includes regular public schools as well as vocational schools, comprehensive schools, magnet schools, and alternative schools. It also contained Catholic schools and private schools (both sectarian and nonsectarian). The MDR list of schools was used to select the sample because we believed it to be more complete and up-to-date than the list compiled by the National Center for Education Statistics for the Common Core of Data (i.e., the most complete list available), and because it contained the names of principals. Initial sample weights (the inverse of the probability of selection) range from 22.88 for urban middle schools to 182.22 (for rural elementary schools). Because of the very large number of rural schools in the U.S., sampling probabilities for rural schools were relatively low (1 or 2%) whereas the sampling probability of urban middle schools was higher (over 4%).

In phase 1, schools were contacted directly to seek their participation in the project.[9] In phase 2, for sampled secondary schools and for elementary schools in districts containing sampled secondary schools, a more complicated recruitment procedure was followed by Westat.[10]

---

[9] Some principals indicated that school district approval was required before the school could participate. In these cases district personnel were contacted to request endorsement of school participation in the project. Some of these districts refused to participate – citing obstacles such as too many surveys in schools or a policy of not conducting surveys at certain times of the year. Some districts required the completion of a formal application for approval of research. In all cases where such a requirement was made, we prepared an application. Not all districts acted on these applications.

[10] The ambitious undertaking of collecting data from samples of students and teachers in phase 2 was made possible by a merger of our research project with a project sponsored by the U.S. Department of Education that was being planned by Westat and Gottfredson Associates to investigate violence and its prevention in schools. Westat – a much larger survey research organization than Gottfredson Associates – undertook the burden of arranging with schools to conduct student and teacher surveys in secondary schools in the sample, and of implementing those surveys. Unfortunately, the Westat-Gottfredson Associates project was conducted pursuant

(This procedure is described below where the sampling of teachers is discussed.) For other elementary schools in the sample, research personnel at Gottfredson Associates contacted the schools directly. Elementary schools in districts where Westat was seeking secondary school participation were contacted by Gottfredson Associates personnel after Westat had determined the outcome of its interaction with the district. Schools in districts with sampled secondary schools were approached only following district agreement to participate. Westat secured data from secondary schools and Gottfredson Associates secured data from elementary schools.

**Prevention Activities**

Sampling of prevention activities within participating schools began with the list of activities identified in the principal phase 1 questionnaire for program identification and accompanying activity detail booklet (or for a small number of schools identified with a short-form questionnaire completed via telefax or telephone when the full-form had not been returned in phase 1). The number of distinct prevention activities identified in this way was greater than we had anticipated, so we sampled activities to limit the reporting burden on schools. In the phase 1 activity detail booklet principals had been asked to identify two individuals who could describe each activity. In telephone calls in preparation for the phase 2 survey we attempted to determine if specific prevention activities were still underway in schools, which eliminated some activities. No more than one activity was selected from each category for each school.[11]

Sometimes the activity sampling described in the foregoing paragraph resulted in several activities with the same individual as the only identified informant. Sometimes, the principal had been identified as the person who could provide more information for two or more prevention activities (and in all cases the principal would be asked to complete the phase 2 principal questionnaire describing school-wide activities). When it occurred that an individual would be asked to complete more than two questionnaires, we attempted to determine in discussion with the school principal whether others in the school could describe the sampled activity. We were not always able to get the principal on the phone, and there were many instances in which the principal was not able to identify alternative respondents. Accordingly, we randomly re-sampled

---

to a contract with the U.S. Department of Education. The Paperwork Reduction Act required substantial paperwork in pursuit of Office of Management and Budget approval for student and teacher questionnaires. This delayed data collection and impaired the phase 2 teacher and student response rates for secondary schools.

[11] An exception to this no-more-than-one-per-category rule was that twelve identifiable "packaged" programs were selected with probability = 1.0 if not selected by the random procedure. The packaged programs selected in this way were Assertive Discipline, Conflict Mediation or Conflict Resolution (not including peer mediation), Drug Abuse Resistance Education (or D.A.R.E.), Gang Resistance Education and Training (or G.R.E.A.T), Quest, Here's Looking At You 2000, Peer Mediation (including student mediation), Cooperative Learning, Students Against Drunk Driving (or S.A.D.D.), Red Ribbon, McGruff, and TRIBES.

within prospective respondents so that respondents were not asked to complete more than two questionnaires. The principal was limited to the phase 2 principal questionnaire and one activity questionnaire.

Telephone interaction with elementary schools was conducted by research personnel at Gottfredson Associates, and interaction with secondary schools was conducted by Westat personnel. Random sampling of activities was conducted by researchers at Gottfredson Associates. The principal was asked to designate an individual to serve as survey coordinator so that one package of questionnaires could be delivered to the school and one person would be responsible for receiving, distributing, and returning the completed materials. In secondary schools, where Westat personnel engaged in negotiations with schools, survey coordinators were also responsible for student and teacher surveys and for assisting Westat in securing rosters of students and teachers. Sometimes the principal designated another individual, and sometimes the principal decided to serve as coordinator.

### Teachers and Students

We sought to survey all teachers and obtain completed student questionnaires from a probability sample of 50 students in participating secondary schools. Westat personnel were responsible for the sampling of teachers and students in participating secondary schools. Westat, which has conducted a number of surveys of schools under contract with the U.S. Department of Education has developed a standard approach to the task which involves first contacting each Chief State School Officer, then requesting participation from local education agencies (school districts), and contacting schools only when district participation is secured. This traditional approach is particularly appropriate when districts are a primary sampling unit (PSU). In the present study, Gottfredson Associates had earlier selected a sample of schools in which schools were the PSU. Accordingly, Westat had to negotiate with a relatively large number of districts to implement the traditional strategy. Details of the state, district, and secondary school recruitment effort by Westat are provided elsewhere.[12] District recruitment began in November 1997 and for some districts continued into April 1998. Once districts agreed to participate, Westat personnel approached principals to request school participation. Recruiters offered secondary schools an incentive of $100 to participate,[13] and negotiated with principals about the nature of their participation (sometimes dropping the request for student participation to avoid refusal to participate in any part of the project).

To prepare for surveys, survey coordinators were asked for information about average student attendance, percentage of students unable to read English at the 6th grade level, expected survey date, and last day of school; and coordinators were asked to send a roster of students and teachers. In most cases all teachers were included in samples, but students were usually sampled. Where possible (i.e., where Westat was able to obtain a roster indicating student sex), the school population of students was stratified by sex and a systematic $1/n$ sample of students was drawn. When sex was not known but grade level was known, the population was stratified by grade level and a $1/n$ sample of students was drawn. In other cases, a $1/n$ sample of students was drawn. The size of $n$ depended upon (a) the number of students in the school, (b) the school's typical attendance rate, (c) the percentage of low English proficiency students, and (d) an anticipated response rate of .8 so that an expected 50 students would complete questionnaires.

---

[12] Crosse, S., Burr, M., Cantor, D., & Hantman, I. (2000, April 14). *Study on school violence and prevention: Intermediate level: Draft report* (Appendix A). Rockville, MD: Westat.

[13] Recruiters also offered elementary school principals a monetary incentive to participate in the phase 2 surveys.

## Conducting Surveys and Participation Rates

*Phase 1.* In conducting the phase 1 principal survey (PQ1), we determined that of the 1287 entities sampled, 7 were closed and one was not a school – leaving 1279 schools in the sample. In addition, the location or level classifications were found to be incorrect for some schools, so the number of actually sampled schools is sometimes greater and sometimes less than 143 per cell.[14] Overall, useful responses were received from 848 schools in PQ1, 66.3% of those from which responses were sought.

*Phase 2 Principal Survey.* In conducting the phase 2 surveys, an additional school was found to have been closed, leaving 1278 schools in the sample. Completed questionnaires were obtained from 49.7% of these schools. Again, obtaining cooperation was most difficult in urban schools, where completed phase 2 principal questionnaires were obtained for 45.5% of the sample. Rural schools were more cooperative, and we obtained completed phase 2 principal questionnaires from 57.1% of rural schools. Participation ranged from a low of 39.6% for urban high schools to 58.4% for rural middle grades schools.

*Student Survey.* We sought the completion of student questionnaires in all secondary schools. Usable questionnaires were completed by 16,014 students. Overall, 36.4% of the secondary schools from whom participation was sought in student surveys participated at a useful level. Participation was better in rural schools than in urban schools, and it was better in middle/junior high schools than in high/vocational/combined schools. Participation ranged from a low of 22.8% of urban high schools to 50.4% of rural middle/junior high schools.

*Teacher Survey.* We sought the completion of teacher questionnaires in all secondary schools, and usable questionnaires were completed by 13,103 teachers. Overall, 47.6% of the secondary schools from whom participation was sought in teacher surveys participated at a useful level. Rural schools were more cooperative than suburban or urban schools. Participation ranged from a low of 39.0% of urban high schools to 59.1% of rural middle/junior high schools.

---

[14] The location codes obtained from the mailing list vendor (the original source of which was the Common Core of Data developed by the U.S. Department of Education) were often in error. It appears that many schools were misclassified as to location in the CCD. Efforts were made to identify and reclassify misclassified schools.

*Activity Coordinator Survey*. Of 8,043 initially sampled activities, we sent booklets for 7,104 activities to identified individuals.[15] Of these, 3,691 were completed (45.9% of all initially sampled activities and 51.9% of the activities for which completion was requested).

We had more difficulty in getting principal cooperation in urban schools – particularly urban high schools. Whereas 75% and 57% of rural elementary schools participated in the Phase 1 and 2 surveys, only 59% and 40% of urban high schools participated in those surveys. Elsewhere (G. D. Gottfredson et al., 2000), we report in more detail on characteristics of school community location that are associated with the principal's decision to participate, and that private schools participated at a lower rate than public schools.

No one can know precisely how much bias may have been introduced by survey nonparticipation. School weights (described below) were applied to correct for different response rates for different categories of schools. Whether such corrections were fully effective in eliminating bias cannot be known. Elsewhere (G. D. Gottfredson & Gottfredson, in press) we speculate on reasons for the increasing difficulty in obtaining school cooperation in social surveys.

Despite worries that lack of complete participation create, the sample has other virtues that enhance its representativeness. First, the sample includes private and Catholic schools from whom participation is often difficult to obtain (and which are therefore usually omitted altogether in national surveys). Second, non-response adjustments were made separately for categories of schools found to be participating at different rates in an effort to reduce non-response error and make the estimates produced as representative of the nation's schools as possible.

## Weighting and Statistical Procedures

### Weights

The sample of schools is intended to allow weighting by the inverse of the probability of selection in order to represent all of the schools in the 50 states and the District of Columbia serving students in grades K through 12. The sample also allows weighting to represent all teachers and all students. Base weights were developed to take account of the probability of selection. Weights were also developed to take account of non-response error. Nonresponse error occurs when sampled units (schools, activities, teachers, or students) fail to participate or to answer questions. School-level non-response adjustments for principal, teacher, student, and activity questionnaires are based on the sample strata and predictors of participation probability

---

[15] As described earlier, when a single individual would have been asked to complete more than two questionnaires activities were re-sampled so the smaller number of booklets were sent.

(school size, auspices, grade level composition). Respondent-level (within school) weights for teacher, student, and activity questionnaires were also developed to account for sampling fraction and to make within school nonresponse adjustments. Final weights are the product of base weights, school-level nonresponse weight, and respondent-level nonresponse weight. The nonresponse adjustments are expected to reduce bias due to nonresponse error, although there is no way to test whether this reduction occurs, and the possibility of nonresponse error remains a limitation of the present research – particularly for the urban secondary school student surveys.

Estimates in this report make use of weighting. Exceptions to the general use of weighting include the following: (a) Within school weights are not applied when producing school-level measures. This is because the application of unequal weights increases both true score and error and seems to us a poor psychometric practice. (b) Weights are not applied when examining correlations among school-level measures derived from different surveys (e.g., student and principal surveys). In instances in which we examined both weighted and unweighted correlations, both procedures produce similar results.

### Statistical Procedures

Tables report standard errors or confidence intervals for estimated means, proportions, or percentages. The standard errors are estimated using a resampling technique known as the general stratified jackknife (Efron & Gong, 1983) to take into account the complex nature of the sample. Because standard errors cannot be calculated as they could be if simple random sampling had been implemented, they are estimated empirically for weighted sub-sample replicates that mirror the sample design. Variance estimates for the full sample are based on the variance of replicate estimates. The use of weighted replicates to estimate the magnitude of sampling errors has the added virtue that these estimates include the effect of weight adjustments.

In some cases the jackknife procedure produced estimates of sampling errors that were smaller than they would be under simple random sampling. In other words the design effect (Kish, 1965/1995) was less than 1.0. In these cases, we substituted standard errors for the sample proportions (or percentages) for simple random samples of the same number of observations.

In principal it should have been possible to estimate standard errors for logistic regression coefficients using the resampling procedure as well. We experienced difficulty in getting the resampling program (WesVar 3.0) to properly estimate logistic regression models, however. Accordingly, we examined design effects for a range of estimated statistics to arrive at an estimated average design effect for standard errors in logistic regression.[16] Logistic regression models were estimated using unweighted data, and standard errors were inflated assuming a design effect of 2.93.

---

[16] The design effect is the ratio of the variance error in the complex sample to the variance error in a sample of the same size under conditions of simple random sampling (Kish, 1965/1995).

## Validity Checks

Some of the estimates of interest in the present research are based on the self-reports of students about their own gang participation. Despite convincing evidence that self-reports of delinquent behavior show impressive validity and usefulness in research (Hindelang, Hirschi, & Weis, 1981), and despite the advantages of self-report measures for many purposes (Huizinga, 1991) there remain concerns about their validity. One general concern pertains to the convergence of self-reports with other types of measures. General reassurance on this is available from studies of children's reports of parental educational and occupational level (Mare & Mason, 1980), students reports of their activities and accomplishments in high school compared to verifiable reports from school staff (Laing, Sawyer, & Noble, 1987), and of self-reported delinquency and official records (Hindelang et al., 1981). Research by Cornell and Loper (1998), however implies that it is possible to identify a subset of school survey respondents who may be providing sloppy or deliberately invalid data and that the rates of violence-related delinquent behavior reported by this subset of respondents is much higher than other respondents on average. Rosenblatt and Furlong (1996) also found that students who failed consistency checks reported more violence victimizations than did other students.

Accordingly, we constructed a *Veridicality Index* by comparing the responses of student survey participants to pairs of questions in which certain patterns of responding are logically inconsistent. In three questions respondents were asked if they had smoked marijuana, smoked cigarettes, or drunk alcoholic beverages in the last year. In three other questions respondents were asked if it was their intention never to smoke marijuana, smoke tobacco, or drink alcoholic beverages. A pair of responses indicating that the individual would never smoke marijuana and that the person had smoked marijuana in the past year was taken as a probable sign of careless, untruthful, or uncooperative responding. Scores on this Veridicality Index could range from 3 (no disagreements) to 0 (all pairs in disagreement). When data are tabled separately for apparently veridical respondents, individuals with scores of 0 or 1 are excluded.

Research reported elsewhere (G. Gottfredson et al., 2000) has provided some reason to be skeptical about the validity of school principals' reports about themselves and the school. Specifically, principals' reports about their own leadership behaviors showed limited convergence with teachers' reports about their leadership and principals' reports about crime in the school showed limited convergence with measures of school of victimization or safety based on the reports of students and teachers. Furthermore, a meta-analytic examination of correlations of performance self-ratings for managers with ratings made by the managers' supervisors or peers implied mean correlations of only .19 and .17, respectively (Conway & Huffcutt, 1997).

Accordingly, we examined the convergence between principals' reports of gang problems in the school and rates of gang participation based on students' reports. Specifically, we classified a school as having a gang problem if it was among the 10% of schools with the largest percentage of students reporting that they belonged to a gang (about 14% of students so reporting).

## Ethnicity

Tabulations for different racial/ethnic groups are based on survey respondents' ethnic self-identification. Students were asked, "How do you describe yourself?" with response options being White, Black, Asian or Pacific Islander, American Indian or Alaskan Native, and Other. In a second question respondents were asked, "Are you of Spanish or Hispanic origin?" Teachers were asked a similar pair of questions, the first reworded as, "Which of the following best describes you?" The pair of questions were used to construct the following ethnicity classification: (a) White non-Hispanic, (b) Black non-Hispanic, (c) Asian or Pacific Islander non-Hispanic, (d) American Indian or Alaskan Native non-Hispanic, (e) Other non-Hispanic, and (f) Hispanic. Accordingly, members of the Hispanic group in tables may also be White, Black, Asian, Native American, or of some other ethnicity.

# 5. Student Gang Participation

## Extent of Gang Membership and Demographic Characteristics

Previously available estimates of the proportion of young people involved with gangs are based on samples from selected locations. For example, Esbensen and Winfree (1998) reported results from surveys of a large sample of eighth graders in 41 schools in 11 cities. From their Table 1 we can calculate that 13.6 percent of the males and 8.5% of the females in their sample reported gang membership. Gang membership was higher for African-American (12.3%) and Hispanic (12.3%) students than for White students (6.4%).

Estimates from the present national sample of secondary school students are displayed in Table 1. Among boys, an estimated 7.6% belong to a gang when all respondents are included in analyses and an estimated 7.1% belong when only those respondents with scores in the acceptable range on the Veridicality Index (see the previous chapter) are included. Among girls, an estimated 3.8% belong to a gang - an estimated 3.6% when analysis is limited to veridical respondents. As did the Esbensen and Winfree (1998) results, the present results imply that there is more female participation in gangs than is often assumed.

Despite some popular notions that youth gangs are an urban phenomenon, the differences in percentages of urban students reporting gang participation does not appear very much higher than the percentages of suburban and rural students reporting participation - particularly when the standard errors for these percentages are taken into account.

Information about the percentage of students participating in gangs according to ethnic self-identification is shown in the bottom panel of Table 1. Percentages are highest for males who are Black (13%), Other (11%), American Indian or Alaskan Native (11%), or Hispanic (10%). The participation rate for American Indian or Alaskan Native girls (9%) is almost as high as the male participation rate. For girls of other ethnic groups the participation rates are lower than the rates for boys, but as is observed for boys the rate among girls is higher for Hispanic, Other, and Black girls than for White or Asian or Pacific Islander girls. Note that for the sample sizes for some sex-ethnic groups are small - with only 118 Native American girls reporting. Attend to the standard errors for the estimated percentages also shown in Table 1. For both male and female Native Americans the standard errors are large.

The evidence of non-trivial levels of female participation in gangs summarized in Table 1 is unsurprising in view of other research showing female participation in gangs (Campbell, 1990; Chesney-Lind et al., 2001; Esbensen & Huizinga, 1993; Fagan, 1990b). Considering our entire sample, 35% of youths reporting that they belong to gangs are girls. Girls compose about 52% of the total sample, so they are proportionately under-represented among gang members, but the

Table 1
*Percentage of Students Reporting Gang Membership by Student Characteristic and Apparent Veridicality*

| | Males | | | | | | Females | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All | | | Veridical | | | All | | | Veridical | | |
| Age | % | *SE* | *n* | % | *SE* | *n* | % | *SE* | *n* | % | *SE* | *n* |
| All grades | 7.6 | .63 | 7580 | 7.1 | .58 | 7297 | 3.8 | .37 | 8059 | 3.6 | .35 | 7895 |
| Sixth grade | 6.0 | 1.02 | 1151 | 5.7 | 1.02 | 1116 | 4.3 | .77 | 1221 | 3.8 | .72 | 1196 |
| Seventh grade | 7.9 | .87 | 1773 | 7.2 | .82 | 1717 | 5.5 | .86 | 1858 | 5.5 | .87 | 1823 |
| Eighth grade | 8.5 | 1.13 | 1648 | 7.4 | 1.04 | 1572 | 5.9 | .68 | 1720 | 5.6 | .66 | 1693 |
| Ninth grade | 8.1 | 1.43 | 922 | 7.6 | 1.30 | 886 | 4.5 | 1.09 | 1011 | 4.4 | 1.03 | 990 |
| Tenth grade | 8.5 | 1.45 | 828 | 8.1 | 1.48 | 790 | 3.1 | .81 | 825 | 2.7 | .76 | 801 |
| Eleventh grade | 6.4 | 1.56 | 725 | 6.2 | 1.45 | 707 | 1.7 | .62 | 820 | 1.6 | .61 | 800 |
| Twelfth grade | 6.9 | 1.52 | 533 | 6.1 | 1.54 | 509 | 1.7 | .70 | 604 | 1.4 | .66 | 592 |
| Location | | | | | | | | | | | | |
| Urban | 8.7 | 1.35 | 1955 | 8.0 | 1.18 | 1882 | 4.2 | .81 | 2057 | 3.9 | .76 | 2010 |
| Suburban | 6.9 | .93 | 2247 | 6.7 | .95 | 2166 | 3.5 | .64 | 2572 | 3.2 | .54 | 2505 |
| Rural | 7.2 | 1.04 | 3395 | 6.5 | .94 | 3266 | 3.7 | .53 | 3450 | 3.6 | .52 | 3399 |
| Ethnicity | | | | | | | | | | | | |
| White | 5.7 | .60 | 5008 | 5.3 | .55 | 4852 | 2.2 | .29 | 5323 | 2.1 | .28 | 5238 |
| Black | 13.4 | 2.35 | 900 | 12.6 | 2.11 | 855 | 6.8 | 1.48 | 1022 | 6.0 | 1.36 | 984 |
| Asian or Pacific Islander | 4.7 | 1.95 | 238 | 4.5 | 1.95 | 234 | 1.2 | .72 | 220 | 1.3 | .73 | 219 |
| American Indian or AK Native | 10.8 | 3.58 | 143 | 9.6 | 3.73 | 133 | 9.2 | 4.28 | 124 | 9.2 | 4.34 | 118 |
| Other | 11.2 | 2.84 | 213 | 10.6 | 2.79 | 204 | 6.7 | 1.83 | 248 | 6.7 | 1.84 | 247 |
| Hispanic | 10.4 | 1.87 | 1064 | 9.8 | 1.79 | 1005 | 7.2 | 1.30 | 1099 | 6.8 | 1.23 | 1068 |

*Note*. % = percentage (weighted estimate). *SE* = standard error of estimated percentage. n = unweighted number of respondents. AK = Alaskan.

percentage of gang members in our sample who are girls contrasts with some historical estimates of female participation. Curry and Decker (1998) reviewed a series of estimates of gang members who are female starting with a 1975 study by Miller (about 10%), a 1988 National

Gang Survey (under 4%), a 1992 national survey of police agencies (3.7%). But Curry and Decker also noted that in the 1992 National Gang Survey "some cities reported that as a matter of policy, females are not counted as gang members" (p. 98), and that almost a third of police departments reporting gang problems did not keep statistics on females. Evidently, some police departments may not be disposed to see females as gang members.

Despite the larger percentages of youths identifying themselves as Black, Hispanic, and Other, the much larger number of White youths in the country (and in the present sample) result in larger absolute numbers of White youths reporting gang participation than youths of any other ethnic group.

The present study produced estimates of gang participation percentages that are lower than the previous study by Esbensen and Winfree (1998). Whereas the Esbensen and Winfree study implied that 13.6% of eighth grade boys and 8.5% of girls were gang members in their Spring 1995 survey, our results imply that 7.4% of eighth grade boys and 5.6% of eighth grade girls were gang members in our Spring 1998 survey. Differences in the specific self-report methods and sampling methods employed in the two studies may explain the difference in rates. Esbensen and Winfree classified a respondent as a gang member if he or she reported *ever* having been in a gang *and* that the gang engaged "in at least one type of delinquent behavior (fighting other gangs, stealing cars, stealing in general, or robbing people)" (p. 516). In addition, their study involved a diverse sample of cities but was based on cities in which two or more police officers had been trained to conduct the Gang Resistance Education and Training program. Probably this means that locations in which police received gang problems are over-represented in their sample.

Accordingly, three methodological differences between the Esbensen and Winfree study and ours will tend to produce lower estimates of percentages of gang participation in the current results. (a) We used reports of gang participation in the last twelve months rather than a lifetime prevalence measure. (b) Our sample was selected and weighted to be nationally representative whereas the other sample may over-represent cities with gang problems. And (c) we chose to base our estimate on respondents not excluded by our veridicality screen. If the same sampling and veridicality screening methods were applied but a lifetime prevalence measure (a report of *ever* belonging to a group), the resulting estimates would have the present estimates as logical lower bounds.

## Veridicality of Self-Reported Gang Membership

We expect people who tell us they commit crimes or belong to gangs also to be liars – at least some of the time. Without independent verification, we cannot be sure that any individual who tells us that he or she belongs to a gang actually does. In the chapter on methods we cited some evidence on the general validity and limitations of self-report, and described a Veridicality Index composed by counting the number of inconsistencies or disagreements in other reports by

Table 2

*Percentage of Students Reporting Own Participation in a Gang by Sex and Score on Veridicality Index*

| | Males | | | Females | | |
|---|---|---|---|---|---|---|
| Veridicality score and meaning | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| 3 - Total agreement | 6.2 | .57 | 6496 | 3.2 | .35 | 7248 |
| 2 - One disagreement | 14.1 | 1.73 | 818 | 7.7 | 1.44 | 666 |
| 1 - Two disagreements | 21.2 | 4.54 | 238 | 14.7 | 4.25 | 138 |
| 0 - Total disagreement | 33.7 | 10.28 | 45 | 21.6 | 10.85 | 27 |
| All respondents | 7.6 | .64 | 7597 | 3.8 | .37 | 8079 |

*Note*. Respondents indicated whether they "belonged to a gang that has a name and engages in fighting, stealing, or selling drugs" in the last 12 months. The veridicality index is based on agreement between three pairs of responses that logically must be consistent if respondent is answering truthfully and carefully, e.g., "in the last 12 months have you smoked marijuana" and "I will never try marijuana or other drugs." % = weighted estimate of percentage, *SE*(%) = standard error of estimated percentage taking complex design and non-response into account, *n* = unweighted number of respondents.

the survey respondents. Persons with zero scores on this index show no agreement in responses to three pairs of items; persons with scores of 3 showed agreement in responses to the three pairs of items. Fortunately, the number of persons with very low scores is small, but as Table 2 shows they are very much more likely to report that they are gang members than are persons with higher scores on the Veridicality Index. A third of the putative male "liars" (scores of zero) reported that they were gang members. Because we cannot expect even hard core liars to be lying in every instance, there is no way of knowing what fraction of the "liars" actually do belong to a gang.

In tables we distinguish between the total sample and a veridical subset of respondents who earned a score of at least 2 on the Veridicality Index. As a practical matter, because the proportion of persons with scores of 0 or 1 is so small, the effect of excluding non-veridical respondents on estimates is usually small. Nevertheless, as Table 1 showed, the estimated percentages of youths who are gang members are lower when only veridical respondents are included.

## Characteristics of Gang Participants and Other Youths

### Educational Expectations

Percentages of gang involved students and other students who say they expect to complete high school and get a college degree are shown in Table 3. Whereas 91% of students who are not involved with gangs report that they expect to complete high school, only 75% of gang involved youths expect to finish high school.

Table 3
*Educational Expectations and Victimization Experiences of Male Youths by Self-Reported Gang Involvement (Percentage "Yes")*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| Expectation or experience | % | *SE* | *n* | % | *SE* | *n* |
| Educational expectations | | | | | | |
| Do you think you will get a college degree? | 46 | 3.8 | 551 | 69 | 1.2 | 6756 |
| Do you expect to complete high school? | 75 | 2.8 | 551 | 91 | .6 | 6751 |
| Victimization experience: This year in school, did anyone . . . | | | | | | |
| Steal something worth less than $1 from your desk, locker, other place at school? | 56 | 3.1 | 553 | 52 | 1.1 | 6751 |
| Steal something worth more than $1 from your desk, locker, other place at school? | 55 | 3.0 | 552 | 48 | 1.2 | 6750 |
| Physically attack and hurt you? | 33 | 2.9 | 550 | 16 | .9 | 6752 |
| Force you to hand over money or things worth less than $1? | 20 | 2.5 | 552 | 5 | .4 | 6758 |
| Take things worth $1 or more directly from you by force, weapons, or threats? | 23 | 3.1 | 550 | 6 | .4 | 6758 |
| Threaten you with a beating? | 36 | 3.5 | 553 | 21 | .8 | 6756 |
| Threaten you with a knife or gun? | 28 | 3.4 | 553 | 5 | .4 | 6757 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index.

Parallel percentages for gang involved and other girls are shown in Table 4. The difference between girl gang members and other girls in educational expectations resembles the difference observed in Table 3 for boys. Only 72% of girl gang members compared with 93% of other girls expect to complete high school. Just over half of gang involved girls expect to complete a college degree compared with three quarters of other girls.

Table 4
*Educational Expectations and Victimization Experiences of Female Youths by Self-Reported Gang Involvement (Percentage "Yes")*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| Expectation or experience | % | *SE* | *n* | % | *SE* | *n* |
| Educational expectations | | | | | | |
| Do you think you will get a college degree? | 52 | 4.1 | 331 | 76 | 1.1 | 7581 |
| Do you expect to complete high school? | 72 | 3.7 | 331 | 93 | .5 | 7572 |
| Victimization experience: This year in school, did anyone . . . | | | | | | |
| Steal something worth less than $1 from your desk, locker, other place at school? | 54 | 4.5 | 330 | 43 | 1.1 | 7574 |
| Steal something worth more than $1 from your desk, locker, other place at school? | 51 | 4.0 | 330 | 41 | .8 | 7574 |
| Physically attack and hurt you? | 22 | 3.4 | 330 | 8 | .5 | 7574 |
| Force you to hand over money or things worth less than $1? | 10 | 2.1 | 330 | 2 | .2 | 7580 |
| Take things worth $1 or more directly from you by force, weapons, or threats? | 17 | 3.3 | 330 | 3 | .3 | 7580 |
| Threaten you with a beating? | 31 | 3.9 | 329 | 13 | .8 | 7578 |
| Threaten you with a knife or gun? | 18 | 3.4 | 330 | 2 | .3 | 7578 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index.

Girls who belong to gangs report somewhat more victimization by theft, and a great deal more of other types of personal victimization. Girls who are gang members are more than twice as likely to report having been attacked, five times as likely to report being a victim of minor

(10% versus 2%) or slightly more substantial robbery (17% versus 3%), about 2.4 times as likely to have been threatened with a beating (31% versus 13%), and 9 times as likely to have been threatened with a knife or gun (18% of girl gang members threatened versus 2% of other girls).

### Personal Victimization

Table 3 also shows the percentage of gang involved boys and other boys who have experienced various types of personal victimization. Although the differences in the proportion of gang involved versus other boys who have experienced thefts are minor, gang members are much more likely to have been victimized in other ways. Gang members are twice as likely to have been physically attacked (33% versus 16%), four times as likely to have been robbed of minor items (20% versus 5%) and robbed of somewhat more substantial items (23% versus 6%). Gang members are more likely to have been threatened with a beating, and more than 5 times as likely to have been threatened with a knife or gun (28% versus 5%).

### Fear and Feeling of Safety

Information about students' feelings of fear or safety in school and at other places is presented for boys in Table 5 and for girls in Table 6. Compared to other students, much smaller percentages of gang involved boys and girls report that they almost always feel safe while in the school building. Whereas 77% of boys and 80% of girls not involved in gangs say that they almost always feel safe in the school building, 57% of gang involved boys and 54% of gang involved girls say that they almost always feel safe in the school building. Gang involved boys and girls are less likely to say that they are almost never afraid that someone will hurt them on the way to or from school than are other students, and the differences are substantial – a 16 percentage point difference for boys and a 17 percentage point difference for girls. The difference in the percentage of gang involved versus other boys and girls who report that they are almost never afraid that someone will hurt or bother them at school is not as great, but gang involved boys and girls saying they are almost never afraid is nevertheless statistically significantly lower than other students (at the .05 level for boys, beyond the .05 level for girls).

Clear differences between gang involved students and other students in avoidance of specific places because of fear of being hurt or bothered by others are apparent in Table 5 (boys) and Table 6 (girls). For example 22% of gang involved boys versus 9% of other boys avoid the shortest way to school or the bus because someone might hurt or bother them.

The bottom panels in Tables 5 and 6 show that exposure to violence is greater for gang involved students than for other students. Compared to other boys, gang involved boys are twice as likely to report that they had to fight to protect themselves, twice as likely to have seen a teacher threatened by a student, and 3.4 times as likely to have seen a teacher hit or attacked by a student. The usually observed sex difference in fighting is erased among gang members: 53% of the girls who reported gang membership reported having to fight to protect themselves – very close to the 52% of gang involved boys who said they had to fight. Among girls who are not

Table 5

*Feelings of Fear or Safety Reported by Male Youths by Self-Reported Gang Involvement (Percentage)*

| Perceptions of fear or safety | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| | % | *SE* | *n* | % | *SE* | *n* |
| How often . . . | | | | | | |
| Do you feel safe while in your school building? (Almost always) | 57 | 2.8 | 551 | 77 | .9 | 6739 |
| Are you afraid that someone will hurt or bother you at school? (Almost never) | 61 | 3.4 | 552 | 68 | 1.1 | 6739 |
| Are you afraid that someone will hurt you on the way to or from school? (Almost never) | 62 | 3.4 | 550 | 78 | 1.0 | 6746 |
| Do you usually stay away from any of the following places because someone might hurt or bother you there? | | | | | | |
| The shortest way to school or the bus? | 22 | 2.7 | 550 | 9 | .6 | 6730 |
| Any entrances into the school? | 16 | 2.6 | 552 | 8 | .6 | 6747 |
| Any hallways or stairs in the school? | 22 | 2.7 | 552 | 9 | .6 | 6748 |
| Parts of the school cafeteria? | 18 | 2.6 | 551 | 8 | .6 | 6748 |
| Any school restrooms? | 23 | 2.9 | 549 | 11 | .6 | 6743 |
| Other places inside the school building? | 23 | 2.7 | 549 | 9 | .6 | 6745 |
| Other places on the school grounds? | 26 | 3.0 | 549 | 10 | .7 | 6748 |
| Outside on the street where you live? | 24 | 2.7 | 551 | 9 | .7 | 6752 |
| Any other place in your neighborhood? | 24 | 2.6 | 551 | 14 | 1.0 | 6746 |
| This year in school, have you . . . | | | | | | |
| Had to fight to protect yourself? | 52 | 3.6 | 547 | 26 | 1.0 | 6749 |
| Seen a teacher threatened by a student? | 53 | 3.2 | 549 | 27 | 1.1 | 6739 |
| Seen a teacher hit or attacked by a student? | 38 | 3.2 | 549 | 11 | .8 | 6737 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index. Adapted with permission from the Effective School Battery copyright © 1984, 1999 Gary D. Gottfredson. Not to be further reproduced without written permission of the publisher.

Table 6

*Feelings of Fear or Safety Reported by Female Youths by Self-Reported Gang Involvement (Percentage)*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| Perceptions of fear or safety | % | *SE* | *n* | % | *SE* | *n* |
| How often . . . | | | | | | |
| Do you feel safe while in your school building? (Almost always) | 54 | 4.0 | 329 | 80 | 1.1 | 7573 |
| Are you afraid that someone will hurt or bother you at school? (Almost never) | 61 | 4.2 | 329 | 70 | 1.2 | 7558 |
| Are you afraid that someone will hurt you on the way to or from school? (Almost never) | 61 | 4.4 | 329 | 78 | 1.5 | 7577 |
| Do you usually stay away from any of the following places because someone might hurt or bother you there? | | | | | | |
| The shortest way to school or the bus? | 16 | 3.3 | 330 | 9 | .6 | 7556 |
| Any entrances into the school? | 15 | 3.2 | 331 | 7 | .6 | 7566 |
| Any hallways or stairs in the school? | 19 | 3.5 | 331 | 8 | .6 | 7564 |
| Parts of the school cafeteria? | 19 | 3.4 | 330 | 7 | .5 | 7568 |
| Any school restrooms? | 18 | 3.4 | 330 | 10 | .6 | 7564 |
| Other places inside the school building? | 18 | 3.3 | 331 | 8 | .6 | 7558 |
| Other places on the school grounds? | 18 | 3.4 | 330 | 11 | .6 | 7563 |
| Outside on the street where you live? | 24 | 3.7 | 330 | 9 | .6 | 7564 |
| Any other place in your neighborhood? | 28 | 3.7 | 329 | 17 | .9 | 7567 |
| This year in school, have you . . . | | | | | | |
| Had to fight to protect yourself? | 53 | 4.3 | 331 | 11 | .7 | 7567 |
| Seen a teacher threatened by a student? | 61 | 3.6 | 331 | 26 | 1.2 | 7567 |
| Seen a teacher hit or attacked by a student? | 34 | 4.4 | 330 | 9 | .6 | 7569 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index. Adapted with permission from the Effective School Battery copyright © 1984, 1999 Gary D. Gottfredson. Not to be further reproduced without written permission of the publisher.

gang involved, the percentage who said they had to fight (11%) is much lower than the percentage of boys who are not gang involved who reported fighting (26%).

## Predicting Gang Participation

A statistical model of gang involvement was developed to examine the contributions of multiple student characteristics to gang participation, and to test the idea that perceptions of fear or safety have incremental validity in distinguishing gang participants from nonparticipants. The model includes (a) student demographic characteristics – age, ethnicity, and sex; (b) measures of social bonding – Commitment to Education and Belief in Rules; (c) a measure of peer influence – Positive Peer Associations; and (d) perceptions of safety versus fear – School Safety.

The following describes the predictor variables:

*Age* is age in years, ranging from age 11 or younger through age 18 or older.

*Ethnicity* recodes the ethnic group variable described in the chapter on methods so that White or Asian non-Hispanic students are contrasted with other students.

*Sex* is student self-reported sex.

*Commitment to Education* is a 14-item scale adapted from What About You?–Form DC (G. D. Gottfredson & Gottfredson, 1999), which has been shown to be a robust predictor of delinquent behavior, drug use, and school performance. In the present study alpha internal consistency reliability coefficients were .83 for boys, .83 for girls, ranged from .80 to .84 for each of the specific grade levels (6th to 12th), .84 for White students, .80 for Black students, .84 for Asian students, .82 for Native American students, .83 for other students, and .83 for Hispanic students. Items include, "The grades I get in school are important to me" and "I won't let anything get in the way of my school work."

*Belief in Rules* is a 23-item scale adapted from What About You?–Form DC (G. D. Gottfredson & Gottfredson, 1999) which has also been shown to be a robust predictor of delinquent behavior and drug use. In the present study alpha internal consistency reliability coefficients were .86 for boys, .85 for girls, ranged from .85 to .87 for each of the specific grade levels (6th to 12th), .87 for White students, .81 for Black students, .85 for Asian students, .83 for Native American students, .85 for other students, and .85 for Hispanic students. Items include, "I want to do the right thing whenever I can," and "It is all right to get around the law if you can" (reverse scored).

*Positive Peer Associations* is a 7-item scale adapted from What About You?–Form DC (G. D. Gottfredson & Gottfredson, 1999) which has also been shown to be a robust predictor of delinquent behavior and drug use. In the present study alpha internal consistency reliability coefficients were .66 for boys, .67 for girls, ranged from .65 to .69 for each of the specific grade levels (6th to 12th), .69 for White students, .62 for Black students, .67 for Asian students, .65 for Native American students, .66 for other students, and .66 for Hispanic students. Items include, "Most of my friends think getting good grades is important," and [My best friend] "gets into trouble at school" (reverse scored).

*Perceptions of School Safety* is a 13-item scale adapted from What About You?-Form DC (G. D. Gottfredson & Gottfredson, 1999) and from the Effective School Battery (G. D. Gottfredson, 1999). Its items are shown in Tables 5 and 6; only the school-related items are scored. When scored at the individual level as it is in What About You?-Form DC and in the present research, it may be taken as a measure of perceptions of safety versus fear.[1] In the present study alpha internal consistency reliability coefficients were .80 for boys, .79 for girls, ranged from .77 to .82 for each of the specific grade levels (6th to 12th), .78 for White students, .78 for Black students, .82 for Asian students, .81 for Native American students, .80 for other students, and .81 for Hispanic students.

The models examined are limited to personal and school characteristics. Family and community characteristics which may also predict gang participation are not examined here.

The statistical model expresses the log odds of gang membership as a function of the foregoing independent or predictor variables. Four successive models were evaluated with predictors added in the order listed above so that the incremental validity of successive sets could be assessed. The simplest models include only youth demographic characteristics. Then psychosocial characteristics that may mediate the influence of background characteristics are added. Student perceptions of safety versus fear are added in the last stage to provide a conservative test of this variable's incremental validity. Models were estimated using data from all survey participants and using data only from participants with high scores on the Veridicality Index.

Results are shown in Table 7. The results are similar for the full sample and when restricted to veridical respondents, and we will focus on the latter. First, the $\chi^2$ for model improvement shows that each successive model produces a statistically significant improvement on the earlier model. Age has little relation to the odds of gang involvement in the present sample, but being White or Asian (non-Hispanic) reduces the odds of gang involvement and being male increases the odds. When all of the predictors are in the model, however, the odds ratio for sex is 1.05, indicating that in the context of the other predictors sex has little direct influence on the odds of gang participation. Ethnicity continues to have a direct influence on odds of gang participation.

---

[1] In the Effective School Battery, this scale is scored at the school level and is used as a measure of school climate.

Table 7

*Logistic Regression of the Log Odds of Gang Involvement on Student Personal Characteristics*

| | Model 1 | | | | Model 2 | | | | Model 3 | | | | Model 4 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Odds ratio | | | | Odds ratio | | | | Odds ratio | | | | Odds ratio | |
| Characteristic | B | $SE_B$ | Exp(B) | 95% CI | B | $SE_B$ | Exp(B) | 95% CI | B | $SE_B$ | Exp(B) | 95% CI | B | $SE_B$ | Exp(B) | 95% CI |
| All respondents | | | | | | | | | | | | | | | | |
| Age | 0.05 | 0.018 | 1.05 | 0.99 -1.12 | -0.01 | 0.020 | 0.99 | 0.92 -1.06 | 0.00 | 0.021 | 1.00 | 0.94 -1.08 | 0.06 | 0.021 | 1.06 | 0.99 -1.14 |
| Ethnicity = White or Asian non-Hispanic | -0.97 | 0.067 | 0.38 | 0.30 -0.47 | -1.06 | 0.074 | 0.35 | 0.27 -0.44 | -1.05 | 0.074 | 0.35 | 0.27 -0.45 | -0.87 | 0.077 | 0.42 | 0.32 -0.54 |
| Sex = male | 0.67 | 0.070 | 1.96 | 1.55 -2.48 | 0.23 | 0.076 | 1.26 | 0.97 -1.62 | 0.16 | 0.077 | 1.18 | 0.91 -1.52 | 0.08 | 0.079 | 1.08 | 0.83 -1.41 |
| Commitment to Education | | | | | -0.36 | 0.038 | 0.70 | 0.61 -0.79 | -0.26 | 0.040 | 0.77 | 0.67 -0.88 | -0.25 | 0.041 | 0.78 | 0.68 -0.89 |
| Belief in Rules | | | | | -1.00 | 0.044 | 0.37 | 0.32 -0.43 | -0.89 | 0.046 | 0.41 | 0.35 -0.48 | -0.88 | 0.047 | 0.42 | 0.36 -0.49 |
| Positive Peer Associations | | | | | | | | | -0.35 | 0.039 | 0.71 | 0.62 -0.80 | -0.29 | 0.040 | 0.75 | 0.65 -0.85 |
| Perceptions of School Safety | | | | | | | | | | | | | -0.51 | 0.030 | 0.60 | 0.55 -0.67 |
| Chi-square for model improvement | 309.41 | | | | 1359.06 | | | | 80.38 | | | | 279.86 | | | |
| df | 3 | | | | 2 | | | | 1 | | | | 1 | | | |
| *p* | <.001 | | | | <.001 | | | | <.001 | | | | <.001 | | | |
| Respondents with high scores on veridicality index | | | | | | | | | | | | | | | | |
| Age | 0.04 | 0.019 | 1.04 | 0.98 -1.11 | -0.02 | 0.022 | 0.98 | 0.91 -1.05 | -0.01 | 0.022 | 0.99 | 0.92 -1.07 | 0.04 | 0.022 | 1.04 | 0.97 -1.13 |
| Ethnicity = White or Asian non-Hispanic | -0.98 | 0.071 | 0.38 | 0.30 -0.48 | -1.08 | 0.078 | 0.34 | 0.26 -0.44 | -1.06 | 0.078 | 0.35 | 0.27 -0.45 | -0.90 | 0.080 | 0.41 | 0.31 -0.53 |
| Sex = male | 0.64 | 0.073 | 1.90 | 1.49 -2.42 | 0.20 | 0.079 | 1.22 | 0.93 -1.59 | 0.13 | 0.081 | 1.14 | 0.87 -1.49 | 0.05 | 0.082 | 1.05 | 0.80 -1.38 |
| Commitment to Education | | | | | -0.39 | 0.040 | 0.68 | 0.59 -0.78 | -0.28 | 0.042 | 0.75 | 0.65 -0.87 | -0.27 | 0.043 | 0.77 | 0.66 -0.88 |
| Belief in Rules | | | | | -0.99 | 0.046 | 0.37 | 0.32 -0.43 | -0.88 | 0.048 | 0.42 | 0.35 -0.49 | -0.87 | 0.049 | 0.42 | 0.35 -0.49 |
| Positive Peer Associations | | | | | | | | | -0.36 | 0.041 | 0.70 | 0.61 -0.80 | -0.31 | 0.042 | 0.73 | 0.64 -0.84 |
| Perceptions of School Safety | | | | | | | | | | | | | -0.48 | 0.032 | 0.62 | 0.55 -0.69 |
| Chi-square for model | 271.24 | | | | 1290.6 | | | | 76.88 | | | | 215.7 | | | |
| df | 3 | | | | 2 | | | | 1 | | | | 1 | | | |
| *p* | <.001 | | | | <.001 | | | | <.001 | | | | <.001 | | | |

*Note.* B = partial regression coefficient in unweighted regression of log odds of involvement on student characteristic. SEB = standard error assuming simple random sampling. 95% CI = 95% confidence interval correcting the standard error to reflect a design effect of 2.93. If the confidence interval includes the value 1.0, plausible estimates of the influence of a predictor on the odds of gang influence include no influence. Exp(B), the odds ratio, gives the change in the odds of gang membership for a change of one unit in the predictor. For age, this is a change in one year, for sex a change from male to female, and for the remaining predictors a change of one standard deviation (as the z-score metric is used for the latter). The veridicality index is used to exclude respondents who made responses inconsistent with truthfulness or careful responding.

In the final model, the 95% confidence intervals for the odds ratios for the bonding variables (Commitment to Education and Belief in Rules), peer associations, and perceptions of safety versus fear never include the value 1.0, indicating that each of these variables significantly reduces the odds of gang participation. These variables are all in a z-score metric (unit standard deviation) so the columns in Table 7 headed Exp(B) show the change in odds ratio associated with an increase of one standard deviation in the predictor. All of these variables have strong direct influences on the odds of gang membership according to the model. The odds of gang membership are reduced by being White or Asian American, committed to education, high in belief in conventional rules, having prosocial peers, and feeling safe.

## Gang Participation, Delinquent Behavior, and Drug Use

### Drug Use

Much higher percentages of youths who are involved in gangs report the use of drugs than do youths who are not gang involved. These results are displayed for males in Table 8 and for females in Table 9. For example, whereas only about 1% of boys or girls who are not gang involved report having used heroin in the last 12 months, 18% of gang involved boys and 23% of gang involved girls report using heroin. High percentages of boys (54%) and girls (42%) who are gang members report that they have sold marijuana or other drugs in the last year. In general, the lower the base rate for involvement with the drug in the general population, the more lopsided the ratio of gang participant to nonparticipant percentage of use. Thus, the ratio of the percentage of cigarette smokers among gang members to the percentage among other youths is about 2:1. For heroin it is 25:1 for boys and 38:1 for girls. Remarkably, 14% of *girl* gang members report taking *steroids* - a behavior that like heroin and crack use is reported by less than 1% of nongang girls.

### General Delinquency

Gang involved youths also engage in much more delinquent behavior than do other youths. Table 10 summarizes the data for boys and Table 11 summarizes the data for girls. For example, 63% of gang involved boys versus 6% of other boys say they have been involved in gang fights in the past 12 months. Among *girls* 66% of girl gang members say they have been involved in gang fights versus just 2% of other girls. Gang members are disproportionately involved in carrying hidden weapons - 51% of gang boys and 32% of gang girls say they have carried a hidden weapon other than a plain pocket knife (compared to 9% and 2% of nongang boys and girls). Despite the relatively small fraction of the sample who are gang members - 8% of the boys in Table 10 - gang members make up a disproportionately large fraction - 32% - of those carrying hidden weapons. Of girls in Table 11, 4% are gang members and they make up 41% of those carrying hidden weapons.

Table 8

*Percentage of Male Youths Reporting Drug Involvement in Last Twelve Months by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| In the last 12 months, have you . . . | % | *SE* | *n* | % | *SE* | *n* |
| Sold marijuana or other drugs? | 54 | 3.5 | 547 | 9 | .7 | 6747 |
| Smoked cigarettes? | 64 | 4.0 | 549 | 31 | 1.2 | 6749 |
| Used smokeless tobacco? | 38 | 3.6 | 551 | 14 | .9 | 6753 |
| Drunk beer, wine, or "hard" liquor? | 72 | 3.1 | 550 | 46 | 1.6 | 6748 |
| Smoked marijuana? | 66 | 3.3 | 546 | 19 | 1.0 | 6740 |
| Taken hallucinogens? | 31 | 3.3 | 551 | 5 | .5 | 6751 |
| Taken sedatives? | 26 | 3.0 | 550 | 3 | .3 | 6745 |
| Taken amphetamines? | 31 | 3.2 | 545 | 4 | .5 | 6745 |
| Taken tranquilizers? | 24 | 2.6 | 551 | 2 | .3 | 6750 |
| Taken heroin? | 18 | 2.5 | 549 | 1 | .2 | 6750 |
| Taken cocaine? | 28 | 2.8 | 548 | 4 | .5 | 6746 |
| Used crack? | 25 | 2.8 | 546 | 1 | .2 | 6750 |
| Used other narcotics? | 27 | 3.1 | 551 | 3 | .3 | 6745 |
| Taken steroids? | 20 | 2.7 | 548 | 2 | .2 | 6747 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index.

Table 9

*Percentage of Female Youths Reporting Drug Involvement in Last Twelve Months by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| In the last 12 months, have you . . . | % | *SE* | *n* | % | *SE* | *n* |
| Sold marijuana or other drugs? | 42 | 4.2 | 330 | 4 | .5 | 7570 |
| Smoked cigarettes? | 74 | 4.7 | 329 | 34 | 1.2 | 7555 |
| Used smokeless tobacco? | 21 | 3.8 | 329 | 3 | .4 | 7570 |
| Drunk beer, wine, or "hard" liquor? | 84 | 3.2 | 329 | 48 | 1.7 | 7550 |
| Smoked marijuana? | 67 | 4.0 | 330 | 19 | 1.1 | 7566 |
| Taken hallucinogens? | 27 | 3.5 | 329 | 4 | .5 | 7570 |
| Taken sedatives? | 26 | 3.4 | 329 | 3 | .4 | 7568 |
| Taken amphetamines? | 32 | 4.1 | 330 | 5 | .5 | 7567 |
| Taken tranquilizers? | 18 | 3.2 | 329 | 2 | .3 | 7569 |
| Taken heroin? | 23 | 3.6 | 329 | .6 | .1 | 7569 |
| Taken cocaine? | 25 | 3.7 | 330 | 3 | .4 | 7561 |
| Used crack? | 27 | 3.7 | 330 | 1 | .3 | 7569 |
| Used other narcotics? | 21 | 3.4 | 329 | 3 | .4 | 7571 |
| Taken steroids? | 14 | 3.0 | 327 | .8 | .1 | 7569 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index.

Table 10

*Percentage of Male Youths Reporting Delinquent Behaviors in Last Twelve Months by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| In the last 12 months, have you . . . | % | *SE* | *n* | % | *SE* | *n* |
| Purposely damaged or destroyed property belonging to a school? | 55 | 3.4 | 550 | 18 | .8 | 6736 |
| Purposely damaged or destroyed other property that did not belong to you, not counting family or school property? | 62 | 2.9 | 552 | 23 | .7 | 6734 |
| Stolen or tried to steal something worth more than $50? | 45 | 3.5 | 552 | 8 | .5 | 6745 |
| Carried a hidden weapon other than a pocket knife? | 51 | 3.1 | 551 | 9 | .5 | 6750 |
| Been involved in gang fights? | 63 | 3.1 | 550 | 6 | .5 | 6746 |
| Hit or threatened to hit a teacher or other adult at school? | 35 | 3.5 | 553 | 4 | .3 | 6754 |
| Hit or threatened to hit other students? | 78 | 2.6 | 549 | 41 | 1.2 | 6737 |
| Taken a car for a ride (or drive) without the owner's permission? | 45 | 2.7 | 551 | 9 | .6 | 6755 |
| Used force or strong-arm methods to get money or things from a person? | 43 | 3.5 | 550 | 5 | .4 | 6756 |
| Stolen or tried to steal things worth less than $50? | 58 | 3.3 | 551 | 20 | .8 | 6744 |
| Stolen or tried to steal something at school, such as someone's coat, from a classroom, locker, cafeteria, or a book from the library? | 40 | 3.1 | 551 | 9 | .6 | 6753 |
| Broken into or tried to break into a building or car to steal something or just look around? | 44 | 3.3 | 552 | 8 | .6 | 6750 |
| Gone to school when you were drunk or high on some drugs? | 61 | 2.8 | 551 | 12 | .9 | 6743 |
| Sniffed glue, paint, or other spray? | 38 | 3.6 | 549 | 10 | .7 | 6747 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index. Adapted with permission from What About You copyright © 1990, 1999 by Gottfredson Associates.

Table 11

*Percentage of Female Youths Reporting Delinquent Behaviors in Last Twelve Months by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| In the last 12 months, have you . . . | % | *SE* | *n* | % | *SE* | *n* |
| Purposely damaged or destroyed property belonging to a school? | 39 | 4.5 | 330 | 9 | .6 | 7573 |
| Purposely damaged or destroyed other property that did not belong to you, not counting family or school property? | 47 | 4.1 | 331 | 10 | .6 | 7567 |
| Stolen or tried to steal something worth more than $50? | 33 | 4.2 | 328 | 4 | .4 | 7576 |
| Carried a hidden weapon other than a pocket knife? | 32 | 3.6 | 329 | 2 | .3 | 7576 |
| Been involved in gang fights? | 66 | 3.5 | 329 | 2 | .3 | 7574 |
| Hit or threatened to hit a teacher or other adult at school? | 31 | 4.0 | 330 | 2 | .3 | 7580 |
| Hit or threatened to hit other students? | 80 | 3.3 | 330 | 25 | 1.0 | 7564 |
| Taken a car for a ride (or drive) without the owner's permission? | 36 | 4.3 | 329 | 7 | .4 | 7577 |
| Used force or strong-arm methods to get money or things from a person? | 21 | 3.4 | 329 | 2 | .2 | 7576 |
| Stolen or tried to steal things worth less than $50? | 49 | 4.9 | 326 | 14 | .8 | 7576 |
| Stolen or tried to steal something at school, such as someone's coat, from a classroom, locker, cafeteria, or a book from the library? | 31 | 4.0 | 330 | 5 | .4 | 7573 |
| Broken into or tried to break into a building or car to steal something or just look around? | 28 | 3.7 | 330 | 3 | .4 | 7581 |
| Gone to school when you were drunk or high on some drugs? | 54 | 4.7 | 329 | 11 | .8 | 7571 |
| Sniffed glue, paint, or other spray? | 40 | 4.0 | 329 | 10 | .6 | 7568 |

*Note:* *SE* = standard error of estimate, *n* = unweighted number of activity descriptions. Table excludes respondents whose responses are undependable according to the Veridicality index. Adapted with permission from What About You copyright © 1990, 1999 by Gottfredson Associates.

Tables 10 and 11 show that both the boys and girls are remarkably violent and destructive. Even among those who are not involved with gangs, 41% of boys and 25% of girls say they hit or threatened to hit other students in the past 12 months, and 18% of boys and 9% of girls who are not gang involved say they purposely damaged or destroyed property belonging to a school. Those involved with gangs are even more violent and destructive. Among gang involved boys, 78% say they hit or threatened other students and 55% purposely damaged or destroyed school property. Among gang involved girls, 80% say they hit or threatened other students and 39% damaged or destroyed school property.

Smaller percentages of gang girls than gang boys report having engaged in some offenses. For example 43% of gang boys report having used force or strong-arm methods to get money or things from a person whereas 21% of gang girls report robbing others. For other offenses – e.g., hitting or threatening others or being involved in gang fights – the sex differences in delinquent behavior usually observed are erased (at least in terms of the annual prevalence data examined here).

### A Closer Look at Who Carries Hidden Weapons

Belonging to a gang and being involved with certain drugs are strongly associated with the carrying of a hidden weapon. Table 12 shows the percentage of secondary school boys using (and not using) various drugs in the past year who reported carrying a hidden weapon other than a pocket knife in the past year. It shows that 57% of the boys who reported the use of crack also reported carrying a hidden weapon, whereas only 10% of the boys who did not use crack carried a hidden weapon.[2] The percentage of drug users carrying a hidden weapon is highest for crack and heroin (57% and 54%), remains at 43% or above for other narcotics, cocaine, sedatives, tranquilizers, steroids, hallucinogens, and amphetamines; stands at 39% for those who have *sold* marijuana in the past year; and drops to 28% for those who smoked marijuana, 25% and 22% for snuff and cigarette users, and 18% for those who drank alcoholic beverages.

Information about girls who have carried concealed weapons is presented in Table 13. Although the percentages of girls carrying weapons is generally lower than the percentages of boys, the pattern of association with drugs and gang membership is similar to that for boys. Highest percentages carrying concealed weapons are observed for heroin, crack, and gang membership. Lowest rates are observed for marijuana, cigarettes, and alcoholic beverages.

Despite the general similarity in the girls' pattern of relations between weapons and drug use to that of boys, the association with steroid use stands out as different. The percentage of girls who use steroids who report carrying a concealed weapon (36%) is second only to the percentage of those using heroin who carry a concealed weapon (44%). Readers should note, however, that use of steroids is very uncommon among girls (only 1.5% report the use of steroids) – even more

---

[2] The text describes results for veridical respondents. Results for the entire sample are similar.

Table 12

*Percentage of Males Reporting the Carrying of a Hidden Weapon by Involvement with Specific Drugs or Gangs*

| | All respondents | | | Veridical respondents | | |
|---|---|---|---|---|---|---|
| Use or participation in last twelve months | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| Used crack | | | | | | |
| Yes | 57 | 3.6 | 371 | 57 | 4.2 | 304 |
| No | 11 | .6 | 7210 | 10 | .6 | 6996 |
| Taken heroin | | | | | | |
| Yes | 54 | 4.6 | 280 | 54 | 5.3 | 220 |
| No | 11 | .6 | 7304 | 11 | .6 | 7083 |
| Belonged to a gang that has a name and engages in fighting, stealing or selling drugs | | | | | | |
| Yes | 52 | 2.9 | 622 | 51 | 3.1 | 551 |
| No | 9 | .5 | 6961 | 9 | .5 | 6750 |
| Used other narcotics | | | | | | |
| Yes | 50 | 3.4 | 426 | 50 | 3.9 | 358 |
| No | 10 | .6 | 7159 | 10 | .6 | 6943 |
| Taken cocaine | | | | | | |
| Yes | 48 | 3.8 | 468 | 47 | 4.3 | 396 |
| No | 10 | .6 | 7114 | 10 | .6 | 6902 |
| Taken sedatives | | | | | | |
| Yes | 47 | 3.5 | 410 | 46 | 3.9 | 349 |
| No | 10 | .6 | 7173 | 10 | .6 | 6950 |
| Taken tranquilizers | | | | | | |
| Yes | 47 | 4.0 | 359 | 48 | 4.4 | 295 |
| No | 11 | .6 | 7230 | 10 | .6 | 7010 |

(*continued . . .*)

Table 12 (*continued*)

| | All respondents | | | Veridical respondents | | |
|---|---|---|---|---|---|---|
| Use or participation in last twelve months | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| Taken steroids | | | | | | |
| Yes | 47 | 3.9 | 331 | 46 | 4.4 | 269 |
| No | 11 | .6 | 7254 | 11 | .6 | 7032 |
| Taken hallucinogens | | | | | | |
| Yes | 43 | 3.5 | 596 | 44 | 4.0 | 520 |
| No | 10 | .6 | 6994 | 9 | .6 | 6786 |
| Taken amphetamines | | | | | | |
| Yes | 43 | 3.0 | 554 | 43 | 3.4 | 480 |
| No | 10 | .6 | 7024 | 10 | .6 | 6814 |
| Sold marijuana or other drugs | | | | | | |
| Yes | 39 | 2.9 | 977 | 39 | 3.1 | 865 |
| No | 8 | .6 | 6606 | 8 | .5 | 6434 |
| Smoked marijuana | | | | | | |
| Yes | 28 | 1.9 | 1699 | 28 | 1.9 | 1509 |
| No | 8 | .5 | 5876 | 7 | .5 | 5782 |
| Used smokeless tobacco | | | | | | |
| Yes | 26 | 1.8 | 1227 | 25 | 1.9 | 1119 |
| No | 10 | .6 | 6364 | 9 | .6 | 6189 |
| Smoked cigarettes | | | | | | |
| Yes | 22 | 1.2 | 2597 | 22 | 1.2 | 2342 |
| No | 7 | .6 | 4989 | 7 | .6 | 4960 |
| Drunk beer, wine, or "hard" liquor | | | | | | |
| Yes | 19 | 1.1 | 3440 | 18 | 1.1 | 3169 |
| No | 6 | .6 | 4146 | 6 | .6 | 4133 |

*Note*. Veridical respondents are those with high scores on the Veridicality index. % = weighted percentage of respondents carrying a hidden weapon in last twelve months, *SE*(%) = standard error of the estimated percentage taking the complex design and nonresponse adjustments into account, *n* = unweighted number of respondents.

Table 13

*Percentage of Females Reporting the Carrying of a Hidden Weapon by Involvement with Specific Drugs or Gangs*

| | All respondents | | | Veridical respondents | | |
|---|---|---|---|---|---|---|
| Use or participation in last twelve months | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| Used crack | | | | | | |
| Yes | 35 | 5.7 | 248 | 32 | 5.8 | 225 |
| No | 3 | .3 | 7827 | 3 | .3 | 7686 |
| Taken heroin | | | | | | |
| Yes | 46 | 6.6 | 166 | 44 | 7.5 | 140 |
| No | 3 | .3 | 7909 | 3 | .3 | 7771 |
| Belonged to a gang that has a name and engages in fighting, stealing or selling drugs | | | | | | |
| Yes | 34 | 3.6 | 353 | 32 | 3.6 | 329 |
| No | 2 | .3 | 7716 | 2 | .3 | 7576 |
| Used other narcotics | | | | | | |
| Yes | 27 | 4.0 | 272 | 24 | 4.0 | 249 |
| No | 3 | .3 | 7805 | 3 | .3 | 7664 |
| Taken cocaine | | | | | | |
| Yes | 24 | 3.7 | 315 | 22 | 3.8 | 292 |
| No | 3 | .4 | 7753 | 3 | .3 | 7612 |
| Taken sedatives | | | | | | |
| Yes | 28 | 3.8 | 344 | 25 | 3.8 | 316 |
| No | 3 | .3 | 7730 | 2 | .3 | 7594 |
| Taken tranquilizers | | | | | | |
| Yes | 31 | 4.9 | 237 | 28 | 4.9 | 214 |
| No | 3 | .3 | 7837 | 3 | .3 | 7697 |

(*continued . . .*)

Table 13 (*continued*)

| | All respondents | | | Veridical respondents | | |
|---|---|---|---|---|---|---|
| Use or participation in last twelve months | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| Taken steroids | | | | | | |
| Yes | 40 | 6.8 | 140 | 36 | 7.4 | 121 |
| No | 3 | .3 | 7931 | 3 | .3 | 7787 |
| Taken hallucinogens | | | | | | |
| Yes | 21 | 3.2 | 376 | 19 | 3.2 | 349 |
| No | 3 | .4 | 7700 | 2 | .3 | 7563 |
| Taken amphetamines | | | | | | |
| Yes | 21 | 2.6 | 485 | 19 | 2.6 | 449 |
| No | 2 | .3 | 7590 | 2 | .3 | 7462 |
| Sold marijuana or other drugs | | | | | | |
| Yes | 28 | 3.2 | 491 | 27 | 3.2 | 451 |
| No | 2 | .3 | 7585 | 2 | .3 | 7461 |
| Smoked marijuana | | | | | | |
| Yes | 11 | 1.2 | 1553 | 10 | 1.2 | 1454 |
| No | 2 | .3 | 6520 | 2 | .3 | 6455 |
| Used smokeless tobacco | | | | | | |
| Yes | 20 | 3.4 | 357 | 18 | 3.3 | 328 |
| No | 3 | .3 | 7720 | 3 | .3 | 7585 |
| Smoked cigarettes | | | | | | |
| Yes | 7 | .8 | 2773 | 6 | .7 | 2614 |
| No | 2 | .3 | 5288 | 2 | .3 | 5283 |
| Drunk beer, wine, or "hard" liquor | | | | | | |
| Yes | 6 | .7 | 3578 | 6 | .7 | 3425 |
| No | 1 | .2 | 4478 | 1 | .2 | 4467 |

*Note*. Veridical respondents are those with high scores on the Veridicality index. % = weighted percentage of respondents carrying a hidden weapon in last twelve months, *SE*(%) = standard error of the estimated percentage taking the complex design and nonresponse adjustments into account, *n* = unweighted number of respondents.

uncommon than heroin (1.6% report the use of heroin). For many of the drug use subgroups in Table 13 the *n*s are small and standard errors for the estimated percentages are therefore large.

Popular media accounts of why students carry hidden weapons sometimes emphasize fear as an explanation. This possibility is examined in Table 14, which shows the percentage of students who report having carried a concealed weapon according to the level of fear they express that they will be hurt or bothered at school. Students who are fearful are somewhat more likely to carry a hidden weapon, but the association is not a strong one.

## An Unexamined Issue

In this chapter we have examined a number of individual-level correlates of gang participation. We have not, however, examined what distinguishes gang members from nonmembers in the same communities. Some of the differences observed may be due to demographic or social differences in neighborhoods with and without gangs.

Table 14

*Percentage of Secondary Students Reporting That They Have Carried a Hidden Weapon Other Than a Pocket Knife in the Last Twelve Months by Level of Fear of Being Bothered in School*

| Afraid that someone will hurt or bother you at school | All respondents | | | Veridical respondents | | |
|---|---|---|---|---|---|---|
| | % | *SE*(%) | *n* | % | *SE*(%) | *n* |
| Males | | | | | | |
| Sometimes or almost always | 15 | 1.0 | 2615 | 14 | 1.0 | 2494 |
| Almost never | 11 | .7 | 4963 | 11 | .7 | 4801 |
| Females | | | | | | |
| Sometimes or almost always | 5 | .8 | 2576 | 4 | .8 | 2514 |
| Almost never | 3 | .4 | 5485 | 3 | .3 | 5385 |

*Note.* Veridical respondents are those with high scores on the Veridicality index. % = weighted percentage, *SE*(%) = standard error of the estimated percentage taking the complex design and nonresponse adjustments into account, *n* = unweighted number of respondents. Probability of the difference in the percentage carrying weapon for the greater and lesser fear groups among veridical boys = .002; among girls the corresponding probability = .051.

# 6. Schools and Gang Problems

Surveys of police agencies and media reports imply that gang problems are concentrated in certain locations – not distributed uniformly throughout the United States (Miller, 2001). One would expect gang problems to be greater in some locations than others and in some schools than in others.

## Principals' Reports of Gang Problems

Principals were asked to report whether gangs are a problem in their schools and in their communities.[3] Overall, 36% of principals reported that gangs are a problem in their communities (see Table 15). Almost two-thirds (65%) of *urban* principals report that gangs are a problem in their communities, over a third (36%) of *suburban* principals report that gangs are a community problem, and almost a fifth (19%) of *rural* principals report that gangs are a problem in the community. An estimated 34,545 schools are located in communities with gang problems according to principal report. About half of these – 17,146 schools – are located in urban areas.

The number and percentage of principals who report that gangs are a problem *in their schools* is astonishingly low in view of the much more frequent reporting of community gang problems. Overall, only 5.4% of schools have gang problems according to principal reports. Middle and high school principals are more likely to report that gangs are a problem in the school (8.8% and 8.4%) than are elementary school principals (3.4%). An estimated 5,350 schools have gang problems according to principal report. Most of these (3,269 schools) are middle or high schools.

## Relation of Principal Reports of Gang Problems to School and Community Characteristics

Information about the community and other characteristics of schools in which principals reported the existence of a gang problem is summarized in Table 16. The table shows odds ratios. Continuous variables are all rescaled as unit variance deviation scores (*z* scores) so that the odds ratios tabled are those associated with an increase of one standard deviation in the school or community characteristic. For categorical variables, the category with which the tabled categories is contrasted is named in the table.

---

[3] See the chapter on research methods for wording of the questions and the definition of gang with which principals were presented.

Table 15

*Estimated Number and Percentage of Schools for Which Gangs are a Problem in the School or in the Community According to the School's Principal*

| | Problem in the school[a] | | | | Problem in the community[b] | | | |
|---|---|---|---|---|---|---|---|---|
| | Number | | Percentage | | Number | | Percentage | |
| Group | *N* | *SE* | % | *SE* | *N* | *SE* | % | *SE* |
| All schools | 5,350 | 995 | 5.4 | 1.0 | 34,545 | 2,451 | 36 | 2.2 |
| Level | | | | | | | | |
| Elementary | 2,081 | 812 | 3.4 | 1.3 | 21,932 | 2,226 | 38 | 3.3 |
| Middle/Jr | 1,161 | 253 | 8.8 | 1.9 | 4,531 | 472 | 35 | 3.4 |
| High | 2,108 | 516 | 8.4 | 2.0 | 8,082 | 912 | 33 | 3.4 |
| Location | | | | | | | | |
| Rural | 1,633 | 537 | 3.5 | 1.2 | 8,314 | 1,337 | 19 | 2.9 |
| Suburban | 1,313 | 464 | 5.1 | 1.8 | 9,086 | 1,176 | 36 | 4.1 |
| Urban | 2,404 | 700 | 8.8 | 2.5 | 17,146 | 1,723 | 65 | 4.4 |

[a] Differences by location are not significant for reports of gang problems in school. The percentage of schools for which gang problems in school are reported is significantly higher for high schools and middle schools than for elementary schools.

[b] Percentage of schools for which principals report gangs in the community differs significantly for each location. Percentages reported for gangs in the community do not differ significantly by school level.

Table 16

*Principals' Indication That a School Has a Gang Problem: Odds Ratios for Community and School Characteristics*

| Community or school characteristic | *N* | Exp(B) | 95% CI | *p* |
|---|---|---|---|---|
| Community (*z*) | | | | |
| Concentrated poverty and disorganization (trimmed) | 602 | 1.13 | .84 - 1.52 | |
| Urbanicity | 602 | 1.36 | .99 - 1.86 | .06 |
| Immigration and crowding (trimmed) | 602 | 1.48 | 1.18 - 1.88 | <.001 |
| Auspices (contrasted with Catholic) | 624 | | | |
| Public | | 4.09 | .55 - 30.35 | |
| Private | | .92 | .06 - 15.11 | |
| School demographics (*z*) | | | | |
| Enrollment size | 624 | 1.34 | 1.03 - 1.73 | .03 |
| Preponderance Black students | 469 | 1.10 | .82 - 1.49 | |
| Preponderance Hispanic students | 469 | 1.73 | 1.37 - 2.19 | <.001 |
| Preponderance Black teachers | 383 | 1.18 | .90 - 1.56 | |
| Preponderance Hispanic teachers | 383 | 1.41 | 1.12 - 1.76 | <.01 |
| School location (contrasted with rural) | 624 | | | |
| Urban | | 2.51 | 1.21 - 5.21 | .01 |
| Suburban | | 1.23 | .54 - 2.80 | |
| School level (contrasted with high) | 624 | | | |
| Elementary | | .41 | .16 - 1.05 | .06 |
| Middle | | .91 | .47 - 1.73 | |
| School climate, teacher reports (*z*) | | | | |
| Classroom order | 370 | .67 | .48 - .93 | .02 |
| Victimization | 370 | 1.57 | 1.14 - 2.15 | <.01 |
| Safety | 368 | .63 | .45 - .88 | <.01 |
| Organizational focus | 370 | .64 | .46 - .90 | .01 |
| Administrator leadership | 370 | .58 | .42 - .79 | <.001 |
| Planning | 370 | 1.04 | .74 - 1.44 | |
| Morale | 370 | .57 | .40 - .81 | .002 |
| Principal reports (*z*) | | | | |
| School selectivity | 530 | .80 | .51 - 1.24 | |
| Magnet for problem students | 534 | 1.36 | 1.01 - 1.82 | .04 |
| Conscientiousness | 614 | 1.02 | .75 - 1.38 | |

*Note*. The column headed Exp(B) shows the odds ratio. For community or school characteristics measured as standard scores (signified by (*z*) in the variable label) the odds ratio gives the change in odds of the principal indicating the school has a gang problem associated with a 1 standard deviation increase in the characteristic. For categorical school characteristics (auspices, location, and level) the odds ratio gives the odds of the principal indicating a gang problem relative to private, rural, and high schools, respectively. 95% CI = 95% confidence interval for the odds ratio. No weighting is used; *p* levels assume simple random sampling.

### Community Characteristics

The first panel in Table 16 shows the relations between community characteristics and school gang problems. Concentrated Poverty and Disorganization, Urbanicity, and Immigration and Crowding are factor-based scores for community characteristics derived from 1990 census data by Simonsen (1998). Simonsen matched school zip codes with census data for zip code areas and developed three factor-based measures. G D. Gottfredson et al. (2000) described the factors as follows:

> (1) Concentrated Poverty and Disorganization [is] marked by receipt of public assistance income, high ratio of households with children female-headed to children households with husband and wife present, a high proportion of households below median income, a high ratio of persons below 1.24 times the poverty income level to persons above that level, high numbers of divorced or separated persons relative to married persons with spouse present, high male and female unemployment, and a low proportion of owner-occupied housing units. (2) Urbanicity [is] marked by a high proportion of the population living in an urbanized area, large population size, and a high proportion of persons aged 25 years and over college educated.[4] (3) Immigration and Crowding [is] marked by a high ratio of households with five or more persons to other households and a low proportion of non-English language households.

The first and third factors had long tails and marked skew. Their standard scores were trimmed to the range ±3.0.

The Concentrated Poverty and Disorganization factor is not significantly related to the odds that the principal will indicate that the school has a gang problem (the confidence interval includes 1.0). The Urbanicity factor's confidence interval also includes 1.0, but just barely. The Immigration and Crowding factor is related to gang problems according to principal report – an increase of one standard deviation on this factor is associated with an increase in the odds that the principal will indicate a gang problem equal to 1.48. Principals more often report school gang problems when the community has residential crowding and relatively many non-English speaking households.

### School Auspices

The second panel in Table 16 shows the odds ratios for school auspices, with public and private schools contrasted with Catholic schools. Although the best estimate of the odds ratio is very high for public schools (the odds that a public school principal will indicate a gang problem in school is more than four times the odds that a Catholic school principal will indicate a gang problem), the confidence intervals for the odds ratios for school auspices are very wide and include 1.0.

---

[4] Note that the Urbanicity factor score is not the same variable as the urban-suburban-rural classification. In the fourth panel of Table 16, urban and suburban locations are contrasted with rural location. In the first panel of Table 16, the odds ratio reflects the change in odds associated with a standard deviation's increase in the Urbanicity score.

### School Demographic Composition

The third panel in Table 16 shows odds ratios for school demographic characteristics. The odds that a principal will indicate that the school has a gang problem are greater if it is a large school, has a high percentage of students who are Hispanic, or a high percentage of teachers who are Hispanic.

### School Location and Level

As was observed earlier in Table 15, Table 16 shows that the odds that a principal of an urban school will indicate a school gang problem is 2.5 times the odds that a principal of a rural school will indicate a school gang problem. The odds that an elementary school principal will indicate a gang problem is .4 the odds that a high school principal will indicate a problem.

### School Climate According to Teacher Reports

Several measures of school climate are based on averaged reports from teacher surveys. These measures are described in the following accounts:

*Classroom Order* is a 14-item scale from a research edition of the Effective School Battery. The scale had an individual-level internal consistency coefficient ($\alpha$) of .92 in the present research and an estimated school-level reliability ($\lambda$) for the average school of .79. In high scoring schools, teachers report that students pay attention in class, do not damage or destroy property, and that little disruptive classroom behavior occurs.

*Victimization* is an 8-item scale from the Effective School Battery (G. D. Gottfredson, 1999a; scoring is reversed for this scale labeled Personal Security in the Effective School Battery). The scale had an individual-level internal consistency coefficient ($\alpha$) of .61 in the present research and an estimated school-level reliability ($\lambda$) for the average school of .72. In high scoring schools, teachers report that they experience damage to personal property, being attacked, or receiving obscene remarks or gestures or threats.

*Safety* is an 8-item scale from the Effective School Battery (G. D. Gottfredson, 1999a). The scale had an individual-level internal consistency coefficient ($\alpha$) of .94 in the present research and an estimated school-level reliability ($\lambda$) for the average school of .75. In high scoring schools, teachers report that their classrooms and other places in the school are safe.

*Organizational Focus* is a 16-item scale (G. D. Gottfredson, 2000; G. D. Gottfredson & Holland, 1997) measuring the extent to which the goals and expectations in an organization are clear and well defined. The scale had an individual-level internal consistency coefficient (α) of .94 in the present research and an estimated school-level reliability (λ) for the average school of .86. In high scoring schools, teachers report that the school clearly signals to faculty and staff what performance is expected, that everyone understands what behavior will be rewarded in the school, and that rules and procedures are not ignored.

*Administrator Leadership* is a 12-item scale from the Effective School Battery (G. D. Gottfredson, 1999a). The scale had an individual-level internal consistency coefficient (α) of .84 in the present research and an estimated school-level reliability (λ) for the average school of .88. In high scoring schools, teachers report that there is little administrator-teacher tension in the school, that the principal is a good representative of the school before the superintendent and the board, and that the principal is open to staff input.

*Planning* is a 9-item scale from the Effective School Battery (G. D. Gottfredson, 1999a). The scale had an individual-level internal consistency coefficient (α) of .62 in the present research and an estimated school-level reliability (λ) for the average school of .84. In high scoring schools teachers report that they often work on a planning committee with other teachers or administrators, that the principal plans effectively, and that the faculty are innovative.

*Morale* is an 11-item scale from the Effective School Battery (G. D. Gottfredson, 1999a). The scale had an individual-level internal consistency coefficient (α) of .81 in the present research and an estimated school-level reliability (λ) for the average school of .88. In high scoring schools teachers feel their ideas are listened to and used and that faculty are enthusiastic and cohesive.

The second panel up from the bottom of Table 16 shows that all of these school climate measures except the Planning scale are associated with the odds that the principal will report that gangs are a problem in the school.[5] The odds that the principal will report a gang problem in the school are lower in schools with orderly classrooms (Classroom Order scale), where teachers say the school is safe (Safety scale), where the environment is focused on clear goals and expectations (Organizational Focus scale), where teachers view the principal as a good leader (Administrator Leadership), and where esprit de corps prevails (Morale scale). The odds that the principal will report a gang problem are greater in schools where teachers experience high levels of personal victimization (Victimization scale).

## School Selectivity and Principal Personality

*Selectivity* is a 5-item scale developed for the present research. The scale had an internal consistency coefficient (α) of .81. Scores are based on the reports of a single individual – the school's principal in the phase 1 principal questionnaire. High scoring schools influence who attends the school through the use of admission fees or tuition, scholarships or tuition waivers, selective admissions practices (e.g., high test scores, good conduct, high grades, or other entry requirements), student recruitment programs, or have preferences for the students admitted (religion, faith, culture, ethnicity, or political inclination).

---

[5] The sample sizes for climate measures are lower than for other groups of variables because only secondary schools were surveyed and not all of those schools participated in teacher surveys.

*Magnet for Problem Students* is a 3-item scale developed for the present research. The scale has an internal consistency coefficient ($\alpha$) of .81. Scores are based on the reports of a single individual - the school's principal in the phase 1 principal questionnaire. High scoring schools have students assigned to them who have behavior or adjustment problems, academic or learning problems, or who are under court or juvenile services supervision.

*Conscientiousness* is a 20-item self-report personality measure adapted from Goldberg's (1992) markers for the "Big-5" personality dimensions. Completed by the school's principal, the scale has an internal consistency coefficient ($\alpha$) of .90. High scoring principals describe themselves as careful, organized, and not careless or negligent.

The final panel in Table 16 shows that confidence intervals for the School Selectivity and Conscientiousness scales include 1.0, but that schools scoring high on the Magnet for Problem Students scale more often have gang problems according to the principals' reports. Schools which are assigned many students displaying problem behavior or academic difficulties or who are under court or juvenile services supervision more often have gang problems.

**Summary of Characteristics Related to Principals' Reports of School Gang Problems**

Schools in which the principal reports a gang problem tend to have the following characteristics:

- The community has residential crowding and relatively many non-English speaking households.
- The school has a large enrollment.
- A high percentage of students or teachers are Hispanic.
- The school has an urban location.
- The school is not an elementary school.
- The school has disorderly classrooms and the school is relatively unsafe.
- Teachers experience a relatively great amount of personal victimization.

- The environment is not focused on clear goals and expectations, teachers do not view the principal as a particularly good leader, the faculty do not share a sense of esprit de corps.
- Many students displaying problem behavior or academic difficulties or who are under court or juvenile services supervision are assigned to the school.

### Validity of Principals' Reports

Because of the incongruence between principals' reports of gang problems in their communities and in their schools, additional analyses were performed to compare students' reports of their own participation in gangs with principals reports of gang problems. For secondary schools in which student surveys were conducted, an additional source of information about gang problems in schools is student reports of their own gang membership. Any school in which 14.4% or more of students reported that they belonged to a gang in the past year (i.e., in the 10% of schools with the highest percentage) was classified as having a concentration of gang members in the school, and schools with smaller proportions of students being gang members as lacking a concentration of gang members. The cutting point for the percentage of student gang members was selected so that a reasonable person would (we believe) agree that the school certainly has a gang problem if so many students belong to a gang.

Cross-tabulations of gang problems based on principal and student data are shown in Table 17. The top panel shows the degree of agreement between principal reports of gang problems *in the community* and student gang concentration. Of the 34 schools with a student gang concentration, principals of 22 schools (65%) indicated a gang problem in the community. Cohen's (1960) kappa ($\kappa$) was calculated to provide a measure of greater-than-chance agreement between school classification based on principal and student data[6] and the phi coefficient ($\phi$) was also calculated. For agreement between principals' report of community gang problems and student gang concentration, $\kappa = .14$ ($\phi = .19$) so only 14% of the greater-than-chance possible agreement was observed. The bottom panel shows the degree of agreement between principal reports of gang problems *in the school* and student gang concentration. Of the 34 schools with a student gang concentration, principals of 7 (20%) indicated a gang problem in the school. For agreement between principals' report of school gang problems and student gang concentration, $\kappa = .12$ ($\phi = .12$) so only 12% of the greater-than-chance possible agreement was observed.

---

[6] Kappa is the ratio of greater-than-chance observed agreement to greater-than-chance possible agreement: $\kappa = (f_o - f_c)/(N - f_c)$, were $f_o$ = frequency of observed agreement, $f_c$ = expected frequency of agreement, and $N$ = the total number of observations.

Table 17

*Relation of Principal's Assessment of Gang Problems in School and in the Community to Gang Membership Concentration in the School*

| | Principal reports problem | | |
|---|---|---|---|
| Student gang concentration in the school | No | Yes | Total |
| Gang problem in the community[a] | | | |
| No | **168** | 94 | 262 |
| Yes | 12 | **22** | 34 |
| Total | 180 | 116 | 296 |
| Gang problem in the school[b] | | | |
| No | **244** | 25 | 269 |
| Yes | 27 | **7** | 34 |
| Total | 271 | 32 | 303 |

*Note.* Cell entries are frequencies (unweighted numbers) of schools. Bold underscored entries are frequencies for cells in which principal report and student data agree. Schools are classified as having a student gang concentration of 14.4% or more of students in the sample reported that they belonged to a gang in the past year.

[a] $\kappa = .14$, $\phi = .19$.

[b] $\kappa = .12$, $\phi = .12$.

## Relation of Rate of Student Gang Membership to School and Community Characteristics

An alternative (or additional) perspective on the distribution of gang problems in schools can be obtained from an examination of rates of gang membership derived from *student* reports.[7] A simple model of *school-level* student gang participation *rates* is shown in Table 18 and Figure 1. The model includes variables found to be correlated with gang participation rates. Community characteristics are treated as exogenous variables and the model provides a test of the incremental validity of school auspices (once community characteristics are controlled), student

---

[7] The distribution of percentage of students who report that they are gang members has a marked positive skew. Accordingly analyses are performed with the square root of the percentage of students reporting that they are gang members as the criterion variable.

Table 18

*Decomposition of Effects in a Simple School-Level Model of Student Gang Participation Rate*

| Predictor | Total Association | Contribution Total | Contribution Direct | Contribution Indirect |
|---|---|---|---|---|
| Community | | | | |
| Concentrated poverty and disorganization | .25*** | .25*** | .09 | .16 |
| Foreign born and crowding | .15* | .09 | .02 | .07 |
| Urban location | .15** | .00 | -.06 | .06 |
| School auspices | | | | |
| Public | .23*** | .17** | -.02 | .15 |
| Student assignment | | | | |
| Magnet for problem students | .17** | .16** | .14* | .02 |
| School environment | | | | |
| Student perceptions of safety | -.49*** | -.46*** | -.46*** | – |

*Note.* $R^2 = .27$, residual = .86. Criterion variable is the square root of the percentage of each school's students who reported that they "belonged to a gang that has a name and engages in fighting, stealing, or selling drugs" in the past twelve months.

* $p < .05$

** $p < .01$

*** $p < .001$

assignment (once community characteristics and auspices are controlled), and finally school safety (once all other variables are statistically controlled).

*School Safety* is a 13-item scale from the Effective School Battery (G. D. Gottfredson, 1999a). The scale had an individual-level internal consistency coefficient (α) of .80 in the present research and an estimated school-level reliability (λ) for the average school of .75. In high scoring schools students report that they almost always feel safe while in the school building, do not stay away from places in school because someone might hurt or bother them, and have not had to fight to protect themselves. Other variables in the model were described in the previous pages.

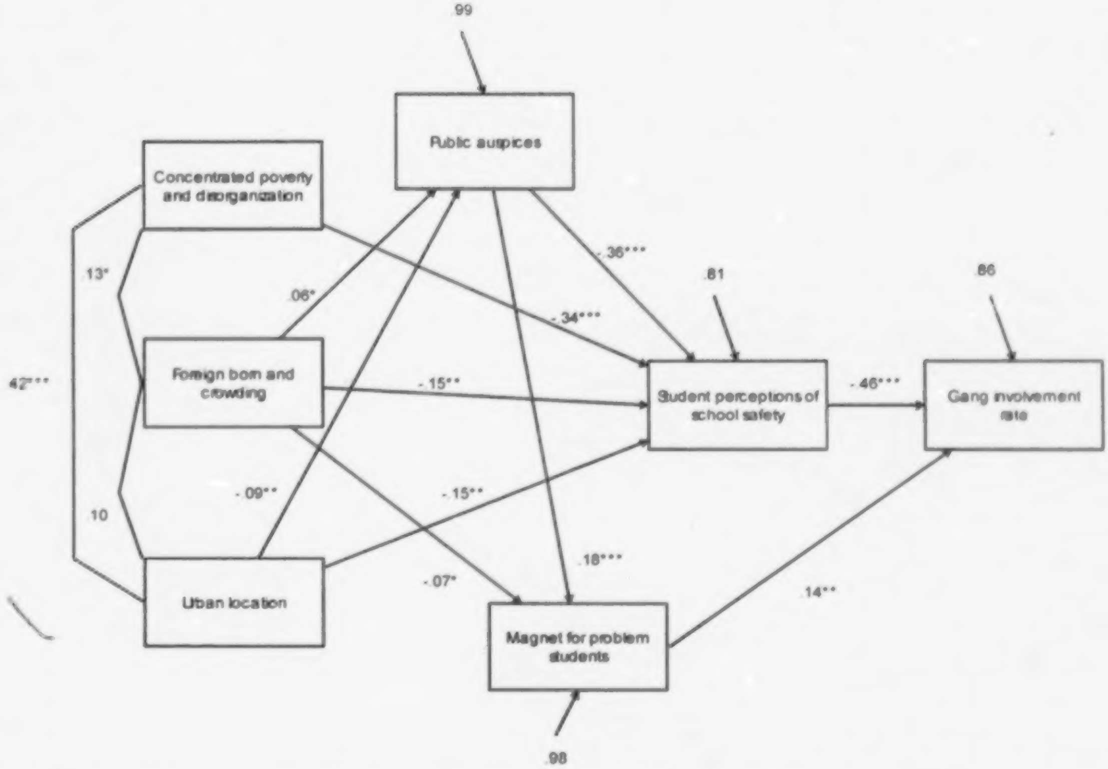

.99
Public auspices
Concentrated poverty and disorganization
.13*
.06*
-.36***
-.34***
.81
.86
.42***
Foreign born and crowding
-.15**
Student perceptions of school safety
-.46***
Gang involvement rate
-.09**
-.15**
.10
.18***
Urban location
-.07*
.14**
Magnet for problem students
.98

Figure 1. Path Coefficients in a Simplified School-Level Model of Gang Involvement Rates

## Community Characteristics

All three of the factor-based scales measuring community characteristics are correlated with school gang participation rate. The largest correlation (.25) with gang participation rate is observed for the Concentrated Poverty and Disorganization scale, implying that rates of gang participation are greatest in schools located in communities where many households receive public assistance income, many children are in female-headed households, many households are in poverty, unemployment is high, and home ownership is low.

According to the model, the influence of community characteristics on gang participation rate is mostly indirect. All three community measures are inversely related to student perceptions of school safety (which has a strong direct negative influence on gang participation rate according to the model). Concentrated poverty and disorganization has the largest direct influence on student perceptions of safety (path coefficient = -.34),[8] but both the foreign-born-and-crowding dimension and the urbanicity dimension have nontrivial influences on safety.

### Public Auspices

Public schools have higher gang participation rates than do other schools ($r = .23$) and the association persists when community characteristics are statistically controlled (path or partial regression coefficient = .17). According to the model, the effects of public auspices on gang participation rates are indirect – mediated by student perceptions of school safety.

### Student Assignment

Schools to which are assigned relatively many students displaying problem behavior, with educational difficulties, or who are under court or juvenile services supervision have higher rates of gang participation. According to the model, the effect of student assignment on gang membership rate is mostly direct. The correlation (.17) is reduced only slightly (to .14) when all other school characteristics are statistically controlled.

### Student Perceptions of Safety

By far the largest correlation observed with school gang participation rates is student perceptions of school safety ($r = -.49$). A higher percentage of students belong to gangs in schools where students perceive the environment as unsafe. The application of statistical controls for all of the other predictors in the model reduces the association of school safety with gang membership rate only slightly (partial regression coefficient = -.46).

### Implications and Limitations of the Statistical Model

The statistical model of school gang participation rates has a number of limitations shared with other survey-based research of this kind. The main limitations are as follows: (1) The criterion measure is based on a sample of each school's students rather than a complete count. (2) It is possible that important causal variables may be omitted from the model; one or more of these may also be correlated with explanatory variables included in the model which could lead to an overestimate of the influence of variables examined in the model. (3) The model is non-recursive – assuming an implied causal ordering that is unidirectional whereas bi-directional influences are plausible.

---

[8] In figure 1, one asterisk signifies that the path (partial regression) coefficient is significantly different from zero at the $p < .05$ level, two asterisks signify that the path coefficient is significant at the $p < .01$ level, and three asterisks signify that the coefficient is significant at the $p < .001$ level.

The third of these potential limitations seems most important. In the first chapter we discussed the role that threat and fear of violence are believed to foster gang development and cohesiveness by a number of gang researchers (Decker, 1996; Hagedorn, 1988; Klein, 1971; Padilla, 1992). This understanding provides a rationale for the causal ordering assumed by the Figure 1 model - with perceived safety influencing gang participation rate. This same perspective, however, implies that it is entirely possible that the presence of a relatively large percentage of students who are gang members increases fear or leads to perceptions that the environment is unsafe. Put another way, gang presence may lead to perceptions of an unsafe environment.[9]

Whatever the causal ordering, the data and the statistical model implicate fear or perceptions of an unsafe environment as a part of the school "gang problem." If youths join gangs because they fear for their safety, then increasing the sense that the environment is safe may reduce gang membership rates. If, on the other hand, gang aggression produces a sense of threat (perceptions that the environment is not safe), this sense of threat is hypothesized by gang researchers cited above to lead to gang cohesiveness and recruitment. The principal practical implication of the model and data on perceptions of school safety and gang membership rates is that increasing the safety of the school environment may be helpful in reducing gang membership rate. Tests of this possibility appear warranted.

An emphasis on school safety is also supported by the earlier examination of school characteristics associated with principals' reports of school gang problems. High rates of teacher victimization and classroom disorder - along with low scores on the teacher Safety scale - were linked to school gang problems according to the principals' reports.

Finally, recall that in the individual-level examination of gang membership that personal feelings of safety was among the variables with incremental validity in explaining gang membership according to the statistical model of that process (see Table 7). The Table 7 results showed that *individuals* who feel unsafe are more likely to belong to a gang. The ecological correlation of a safe environment with rate of gang membership observed in Table 18 implies that higher rates of gang participation are found in *places* that are unsafe. The associations between principal reports of gang problems and teacher victimization rates and school safety reported in Table 16 also imply that gang problems occur in *places* that are unsafe.

---

[9] Reciprocal influences may extend to community variables. Community characteristics are based on the 1990 census whereas student surveys in which perceptions of safety were measured occurred in 1998. Despite the time lag in measurement of community characteristics and perceptions of school safety, it is possible that perceptions of school safety lead to community characteristics at least to some degree. This could occur in the following manner. It may be that *chronically* unsafe schools are perceived to be unsafe year after year, not only by the students who experience them but by the public, real estate agents, and prospective residents of communities. If these perceptions influence residential location decisions (by influencing either departures or arrivals), then they may influence community characteristics measured by census variables. If this process occurs over decades, then it could be a mistake to assume that the temporal ordering of measurement reflects the causal ordering of the process. A similar process could occur in which high rates of school or community gang problems could lead to the establishment or development of schools that are magnets for students displaying problem behavior.

# 7. School-Based Gang Prevention and Intervention Programs

In this chapter we shift attention to the number and nature of gang prevention and intervention programs. In subsequent chapters we report on an assessment of the quality of school-based gang programs and on the degree of exposure to prevention programs by gang participants and others.

## Number and Types of Programs

We estimate that there are 803,000 programs, activities, or arrangements operating in the nation's schools that are intended to reduce or prevent gang participation. To be designated a gang prevention or intervention activity, the activity must have been named by the principal as a program or activity intended to reduce or prevent problem behavior or to promote a safe and orderly environment *and* the respondent describing the activity or program had to indicate that it had the specific objective of reducing or preventing gang participation or that it was targeted at gang members. Gang programs may have additional objectives and additional target groups as well, of course.

A gang *prevention* program is defined as a program, activity, or arrangement that is intended to reduce or prevent gang participation whether or not it is targeted specifically at gang members. There are an estimated 782,000 such programs operating in the nation's schools. A gang *intervention* program is defined as a program, activity, or arrangement that targets gang members regardless of its specific objectives. There are an estimated 160,000 such programs operating in the nation's schools.[1]

### Prevention Programs

Table 19 shows what types of activity compose the large amount of gang prevention activity in terms of the taxonomy of program types introduced in the second chapter. Almost half of the gang prevention programs (49%) involve direct services to students and families. The most common kind of gang prevention program involves prevention curriculum, instruction or training, with an estimated 115,000 such programs in the nation's schools or about 15% of all gang prevention programs. Other common direct service approaches to gang prevention are counseling (78,000 programs or 10% of all gang prevention programs) and recreation,

---

[1] The total number of gang programs is less than the sum of the number of prevention programs and the number of intervention programs because, according to the definition used, a single program can be both a prevention and an intervention program.

Table 19

*Estimated Number and Percentage of Gang* ***Prevention*** *Activities in Schools, by Type of Activity*

| Activity type | Thousands | *SE*(*n*) | % | *SE*(%) |
|---|---|---|---|---|
| Direct services to students or families | | | | |
| Prevention curriculum, instruction, or training | 115.4 | 9.40 | 14.8 | .96 |
| Counseling, social work, psychological or therapeutic interventions | 78.2 | 6.32 | 10.0 | .61 |
| Recreation, enrichment, or leisure | 60.0 | 7.12 | 7.7 | .76 |
| Services or programs for family members | 49.7 | 5.75 | 6.4 | .63 |
| Behavioral programming or behavior modification | 46.3 | 5.12 | 5.9 | .56 |
| Individual attention, mentoring, tutoring, coaching | 36.2 | 5.01 | 4.6 | .54 |
| Organizational or environmental arrangements | | | | |
| Activity to change or maintain culture, climate, or expectations for behavior | 84.5 | 8.38 | 10.8 | .83 |
| External personnel resources in classrooms | 69.1 | 6.66 | 8.8 | .69 |
| Improvements to intergroup relations or interaction between school and community | 51.4 | 5.98 | 6.6 | .62 |
| School planning structure or process – or management of change | 40.1 | 5.18 | 5.1 | .56 |
| Improved classroom organization and management methods or practices | 36.8 | 5.10 | 4.7 | .55 |
| Improved instructional methods or practices | 33.9 | 5.26 | 4.3 | .59 |
| Discipline or safety management activities | | | | |
| Security or surveillance | 59.5 | 5.98 | 7.6 | .66 |
| Youth roles in regulating and responding to student conduct | 20.5 | 3.02 | 2.6 | .33 |
| All types | 781.8 | 48.29 | 100.0 | - |

*Note.* A gang prevention activity is one that aims to reduce or prevent gang involvement. Estimates are weighted to adjust for sampling probability and nonresponse. Standard errors take the complex sample and nonresponse adjustments into account. Unweighted number of gang prevention programs in the sample = 1911. All estimates are from program provider surveys for the fourteen kinds of prevention or intervention activity about which providers were polled.

enrichment or leisure programs (60,000 programs or 8% of all gang prevention programs). Behavioral programming or behavior modification, services or programs for family members, and individual attention activities such as mentoring, tutoring, or coaching are less common types of direct service programs.

Two-fifths (40%) of gang prevention programs involve the organizational or environmental arrangements detailed in the second panel of Table 19. The most common type of organizational or environmental program involves efforts to develop or maintain a distinctive culture or climate for interpersonal exchanges. There are an estimated 84,500 such programs or 11% of all gang prevention programs. The next most common organizational or environmental gang prevention program type entails the use of external personnel resources in classrooms, with 69,000 such programs or 9% of all gang prevention programs. About 51,000 programs involve activity to improve intergroup relations or interactions between the school and the community (about 7% of all gang prevention programs). The use of a school planning structure or a process for the management of change, improved classroom organization and management practices, and improved instructional practices are additional organizational or environmental approaches for preventing gang participation that are used less frequently than other types.

Ten percent of gang prevention programs involve discipline or safety management activities. Security or surveillance programs are common, with about 60,000 such programs (about 8% of all gang prevention programs). Youth roles in regulating and responding to student conduct (e.g., peer mediation) are relatively uncommon, with about 20,000 such programs (3% of all gang prevention programs).

## Intervention Programs

Information about programs that intervene with gang members is summarized in Table 20. The distribution of gang intervention program types differs from that for gang prevention programs. Almost two thirds of gang intervention programs (66%) involve direct services to students or families.

The top panel in Table 20 shows that counseling, social work, psychological or therapeutic interventions are the most common type of gang intervention program, with about 33,000 such programs or 20% of all gang intervention programs. About 20,000 gang intervention programs involve curriculum, instruction, or training (13% of all gang intervention programs). Almost as many - 19,000 gang intervention programs or 12% of programs - involve services for family members. Almost 17,000 school-based gang intervention programs involve behavioral programming or behavior modification (10% of intervention programs). Individual attention activities (such as mentoring, tutoring, or coaching) and recreation, enrichment or leisure activities are used less often as gang intervention approaches.

About a third (33%) of school-based gang intervention programs involve organizational or environmental arrangements. The most common of these are programs that develop or maintain

Table 20

*Estimated Number and Percentage of Gang* ***Intervention*** *Activities in Schools, by Type of Activity*

| Activity type | Thousands | *SE*(*n*) | % | *SE*(%) |
|---|---|---|---|---|
| Direct services to students or families | | | | |
| Counseling, social work, psychological or therapeutic interventions | 32.7 | 4.15 | 20.5 | 2.50 |
| Prevention curriculum, instruction, or training | 20.1 | 3.93 | 12.6 | 2.15 |
| Services or programs for family members | 18.9 | 3.75 | 11.8 | 2.24 |
| Behavioral programming or behavior modification | 16.7 | 3.44 | 10.4 | 1.86 |
| Individual attention, mentoring, tutoring, coaching | 8.7 | 2.23 | 5.4 | 1.26 |
| Recreation, enrichment, or leisure | 8.0 | 2.72 | 5.0 | 1.52 |
| Organizational or environmental arrangements | | | | |
| Activity to change or maintain culture, climate, or expectations for behavior | 16.8 | 3.63 | 10.5 | 2.05 |
| Improvements to intergroup relations or interaction between school and community | 15.9 | 3.63 | 10.0 | 1.94 |
| Improved instructional methods or practices | 13.1 | 4.02 | 8.2 | 2.25 |
| Improved classroom organization and management methods or practices | 6.2 | 2.10 | 3.9 | 1.21 |
| Discipline or safety management activities | | | | |
| Youth roles in regulating and responding to student conduct | 2.6 | .95 | 1.7 | .59 |
| All types | 159.7 | 16.27 | 100.0 | - |

*Note.* A gang intervention activity is defined as a program the activities of which are directed at youths who are gang members. Estimates are weighted to adjust for sampling probability and nonresponse. Standard errors take the complex sample and nonresponse adjustments into account. Unweighted number of gang intervention programs in sample = 411. All estimates are from program provider surveys for the eleven kinds of prevention or intervention activity about which providers were polled. Respondents were asked whether activities target gang members for 11 of the 14 discretionary program categories - excluding school planning, external personnel in classrooms, and security or surveillance.

a distinctive culture or climate for interpersonal exchanges - about 17,000 programs or 10% of all gang intervention programs. Programs that involve improving intergroup relations or interaction between the school and the community are also common with about 16,000 programs of this type (10% of all intervention programs).

Few programs fall in the final group of program types - discipline and safety management activities.[2] The creation of youth roles in regulating or responding to student conduct (such as peer mediation programs) as an approach to gang intervention are the basis for an estimated 2,600 school based gang intervention programs (about 2% of all intervention programs).

---

[2] Survey respondents were not asked if school planning, external personnel in classrooms, and security or surveillance programs target gang members.

# 8. Assessment of Program Quality

In many areas of endeavor it is customary to expect work to meet certain standards. For example, in housing construction, building codes require that 2" by 4" studs be placed 16" on center, that foundations or footings extend 30" below grade, that drain pipes fall ¼" per foot, and that cleanouts be provided at least once per 100' of horizontal drainage pipe. Building inspectors check to see that builders comply with these standards. In highway construction, standards may require that the concrete used in pavement have a compressive strength of 4000 psi, specify the slab thickness, and minimum placement temperatures for joint sealants. In business, company travel policies may require the use of coach air transportation, that receipts for expenditures over $25 be attached to travel vouchers, and that travel vouchers be submitted within a certain time period and signed by the traveler. In hospitals standards promulgated by the Joint Commission on Accreditation of Healthcare Organizations require health care personnel to ask all patients if they are in pain and to obtain a rating of pain intensity on a scale that is used consistently in the organization and by persons of all disciplines (e.g., a 0-10 scale). In aviation, standard operating procedures require pilots to complete a checklist to ensure that all precautions and actions to promote a safe flight have been taken. In medicine it is common practice to specify the medication, dose, mode, frequency, and duration of administration.

In all of these examples, the assessment of the quality of an intervention is relatively straightforward. A building inspector can measure whether studs are placed on 16" centers and whether a drain pipe has the required fall. A highway construction inspector can extract a core from the poured pavement to determine slab thickness and compressive strength. A company's comptroller can review travel vouchers to see if they contain required documentation and signatures - and an auditor can sample financial records to measure the extent to which documentation requirements have been complied with. Hospital visitors can review patient progress notes to determine whether admitting personnel inquired about pain and documented pain intensity. Insurance or aviation authorities can review documentation to determine if pilots used checklists. And a researcher can assess patient compliance with a medical treatment by examining data on the patient consumption of medication, measuring dose, mode, frequency, and duration.

In education and many social service fields, however, standards for what the intervention is to be are not spelled out. Educators and prevention workers talk about providing "counseling," or "instruction," or "peer mediation" or "mentoring" without spelling out clearly what is to be done let alone to whom, how often, how much, or how long it is to be done. To be sure, education is not alone in its neglect of implementation standards. Physicians often recommend to patients that they go on a diet or cut back on their food intake without specifying what obviously must be specified to be clear about the prescription: how many calories a day are to be consumed for how many days and what specific target weight is to be maintained. Some weight loss programs, e.g., Weight Watchers, are much clearer than the typical physician in this regard. But in education it is rare indeed to hear a teacher say something like the following to a student who has fallen behind: "Do an hour of multiplication practice a day using this workbook, six days a week, for the next six months and you should be able to raise your grade from a C to an A."

It appears that those who design, select, or implement gang and delinquency prevention programs may often fail to consider issues of treatment dose or intensity. Why else might one pursue a six or twelve lesson course of instruction to prevent gang participation when the intensity of this intervention is so puny compared to the amount of peer influence and the day in and day out experience in a community that may lead towards gang participation? Why else might one conduct as a gang prevention activity an after school recreation program that provides supervision, safety, and constructive activity to a handful of youths who choose to attend when the vast majority of young people - including those most likely to get into trouble - do not attend or attend sporadically? Any program to prevent gang participation that is potentially effective can be rendered ineffective if it is poorly implemented, partially implemented, sporadically implemented, implemented for only a few of the persons who should benefit from it, or not implemented at all.

## Measures of Program Quality

In the present research we required measures of intervention quality for a broad range of prevention and intervention programs or activities. To the extent possible, we sought to devise measures that could be applied across the different types of programs in the taxonomy introduced in the first chapter. In this section we describe the measures devised for the present research.

Some of the measures are intended to assess the *technical quality* with which interventions are implemented. This includes the extent to which the interventions make use of best practices with respect to methods used or program content and the intensity of the interventions. One measure - *level of use* by school personnel - measures the extent of use or application of the program or activity. A third set of measures assesses the degree of student exposure. This includes the duration of the intervention or activity, frequency of student participation, proportion of students exposed or participating, and ratio of providers to students in the school.

### Best Practices

For some kinds of prevention programs (particularly instructional and cognitive-behavioral instructional, classroom management and instruction, and behavior modification programs) there are bodies of literature describing the interventions that have been applied in research or evaluation studies. But even in areas where there is extensive research there is usually no clear basis for deducing quality factors. Put another way, researchers have generally not conducted research that systematically varies specific facets of intervention in a way that would allow the deductive identification of effective facets. Instead, a variety of program models have been applied, and for the most part it is necessary to observe the features of more and less effective instances of programs to induce the features that constitute best practice.

Behavioral programming or behavior modification is an example of a well understood type of intervention. These interventions use feedback or punishment to decrease undesired behavior or feedback or rewards to increase desired behavior. The principles underlying these behavioral interventions are well described (e.g., Walker, Colvin, & Ramsey, 1995).

Because the essentials of behavior modification are so well known, it is straightforward to obtain information about the quality of implementation. For instance, an essential feature of effective behavioral programs is that they identify and monitor or "track" specific kinds of behavior over time. Another essential feature is the establishment of a baseline; this is done so that whether or not the intervention is effective is relatively unequivocal from the tracking information. Specific behavioral goals and specified responses to specified behavior are features of high quality behavioral programming. Effective behavioral interventions fade reinforcers once behavior has been changed.

Other kinds of activities have a base of professional opinion about best practices but no cumulative research base about efficacy. The assessment of quality for these activities is limited to such things as whether treatment goals are established, whether clients agree to goals, and so on. For example, there is no cumulative body of research showing that school counseling, psychotherapeutic, or social work programs (excluding cognitive-behavioral instruction and behavior modification) prevent drug use, violence, or disruptive behavior. There is, however, a basis for professional judgment that defensible counseling, case management, or psychotherapeutic activity will involve the establishment of treatment goals, an assessment of the problems to be addressed, and so forth. For counseling, it is possible to observe practices taught as exemplary to derive the features that constitute best practices. The use of practices such as assessment, goal setting, and the development of treatment plans are among the elements that may be judged to represent best practices. In these cases, making inferences about program quality is based more on professional judgment, plausibility, and rational analysis than on a cumulative body of evidence from research.

Some kinds of activities have no research base nor a base of professional opinion about best practices. For example, there is no cumulative body of research showing that recreational activities prevent gang participation, drug use, violence, or disruptive behavior. There is no body of research demonstrating what recreational program practices are indicated, what the best methods of delivery are, what recreational content is effective and so on. There is no research establishing dosages at which recreation produces measurable effects. Furthermore, there is no body of professional opinion about essential or desirable features of recreational interventions. For example, we don't find advice about such things as setting goals for recreation, whether participants should agree to goals or become formal members of groups, and so on. In these cases the assessment of quality is limited to such things as student exposure and amount of student participation.

In developing questionnaires to obtain descriptions of the fourteen types of programs, we wrote questions that would obtain reports about whether best practices with respect to content and with respect to methods were part of the sampled programs. For example, for behavior modification we asked if baselines for specific behavior were established, if behavior was tracked over time, if specific behavioral goals were specified, if reinforcements were faded once behavior was changed. The idea was to write questions that would allow a description of each program or activity, including in the description an account of the use of best practices (*and* practices that are *not* good) with respect to methods and content. For example, items were written in such a manner that respondents were able to indicate that they used practices that are inappropriate or represent a misunderstanding of how a method is applied. Some items were written to provide subtle "tests." That is, we attempted to compose assessment items for which the best response was not necessarily obvious to an individual who did not understand the principles of behavior modification. This is much the same way that multiple-choice achievement tests are constructed. For each question there is a correct answer and several plausible distracters. Two items of this kind from the behavioral programming or behavior modification questionnaire are shown in Table 21. The items evidently differ in difficulty, as 81% of program implementers chose the correct response to the first item whereas only 51% chose the correct response to the second item. Programs described by the wrong answers are unlikely to be highly effective.

Table 21
*Illustrative Items With Right and Wrong Answers for a Behavior Modification Program*

| Item | % Marking | Correct alternative |
|---|---|---|
| What most often occurs when student behavior does not change when a behavior modification program is applied? *(Mark one.)* | | |
| The program is discontinued | 4 | |
| A nonbehavioral approach is tried | 6 | |
| Different reinforcers or a different schedule are sought | 81 | ✓ |
| The program is continued for a longer period of time | 9 | |
| | *N*=255 | |
| What usually occurs when the desired changes in student behavior ***do*** occur when a behavior modification program is applied? *(Mark one.)* | | |
| The program is adjusted so that a reward is given less frequently or is more difficult for the individual to earn | 51 | ✓ |
| The program is discontinued | 10 | |
| A nonbehavioral approach is substituted | 11 | |
| The program is continued with no change | 28 | |
| | *N*=253 | |

*Note*. Table shows raw (unweighted) frequencies of item responses.

After questionnaires were developed, the two authors independently identified for each program type those practices that research or professional practice imply are best practices. To do so, we read all items in all questionnaires and marked those items and the responses to those items that correspond to best practices. The judgmental standard applied was, "Would we recommend a program that did not have the features described by this response. For example, we judged that a behavior modification program must *always* monitor or track behavior for a period of time before trying to change it. In other cases the judgments were more lenient. For instance, we judged that a counseling intervention should *sometimes, usually,* or *always* include formal assessments to understand or diagnose the individual person or the situation, because informal observation or assessment may often provide an adequate basis for intervention planning. There was a high degree of congruence between the judgments of the two authors; when we did not initially agree we resolved the difference through discussion or reference to literature.

Table 22 shows how best practices with respect to content and method were measured for the most common type of gang prevention program - prevention curriculum, instruction or training. Table 23 shows how best practices were measured for behavioral programming, and Table 24 shows how best practices were measured for counseling, social work, psychological or therapeutic activity. Details of the measurement of best practices for each of the program types is provided in the Appendix, where the actual items used and an account of all of the response options are displayed. Scores on all best practices scales are the proportion of items for which the keyed answer was given, and they range from 0 to 1.

### Number of Lessons or Sessions

The number of lessons or sessions involved in a program was used as a measure of intervention intensity. Interventions that involve only a single lesson are expected to be considerably weaker than interventions that involve lessons that occur every day for a 180 day school year. The number of lessons/sessions concept does not apply to all intervention types, so data on this facet of activity was sought only for some program types. Because this variable has a marked positive skew, the natural log of the number was examined in some analyses.

### Frequency of Operation

As a measure of extent of use for programs involving organizational or environmental arrangements and discipline or safety management activities, respondents' indication of the frequency with which the program operates was examined. Scores range from 1 (special occasions once or twice a year), to 2 (for a portion of the school year), to 3 (continuously throughout the entire school year). Item wording was adapted for the different specific program types.

Table 22

*Assessment of Best Practices: Prevention Curriculum, Instruction or Training*

**Methods**

1. Instructors assess student mastery and re-teach material that has not been mastered.
2. *Groups* are rewarded for *group accomplishments*
3. *Individuals* are rewarded for their *own achievement*
4. *No special rewards* are applied for student achievement (keyed response = No)
5. Rewards, recognition, or evaluation criteria are not a part of this program (keyed response = No)
6. Students are frequently recognized for the effort they expend
7. Students are frequently recognized for their improvement over prior levels
8. Students are frequently recognized for successful competition against students with similar levels of past performance
9. Teachers usually avoid calling attention to the level of individual student performance (keyed response = No)
10. The instructional methods involve any of the following strategies for increasing the amount of time in instruction: longer class periods, more class periods in the day devoted to instruction, better use of available classroom time, instructional day is extended, instruction occurs over the summer

**Content**

1. Social influence (e.g., recognizing and resisting social influences to engage in misbehavior; recognizing and resisting risky situations, refusal or resistance skills training; assertiveness training)
2. Social problem solving skills (e.g., identifying problem situations, generating alternative solutions, evaluating consequences, decision making)
3. Self-management (e.g., personal goal-setting, self-monitoring, self-reinforcement, self-punishment)
4. Attribution (e.g., attributing the cause of events or circumstances to ones own behavior - as in teaching students that poor grades are due to insufficient effort on the part of the student rather than the task being too difficult)
5. Communication skills (e.g., interpreting and processing social cues, understanding non-verbal communication, negotiating)
6. Emotional control (e.g., anger management, stress control)
7. Emotional perspective taking (e.g., anticipating the perspectives or reactions of others)

Table 23

*Assessment of Best Practices: Behavioral Programming or Behavior Modification*

**Methods**

1. Different specific behavioral or educational goals are set for each individual or group
2. The behavioral or educational plans involved in this program *always* include a method of monitoring or tracking the behavior over time
3. Behavior is *always* monitored or tracked for a period of time before attempting to change it
4. Specific behavioral goals are *always* a written part of each behavioral plan
5. Specific rewards or punishments to be applied in response to specific behaviors are *always* made a written part of each behavioral plan
6. Behavior is tracked and responded to by a behavior modifier daily or more often than daily
7. When student behavior does not change when a behavior modification program is applied different reinforcers or a different schedule are sought
8. When the desired changes in student behavior *do* occur when a behavior modification program is applied the program is adjusted so that a reward is given less frequently or is more difficult for the individual to earn

**Content**

1. Individual behavioral or behavior modification programs (e.g., programs in which the behavior of an individual is monitored and reinforced)
2. Token economy systems in which individuals earn tokens for meeting specified goals
3. Individual education plans in which rewards or punishments in school are contingent on meeting individual *educational* goals
4. Individual behavioral plans in which rewards or punishments in school are contingent on meeting individual *behavioral* goals
5. Home-based backup reinforcement for individual behavior in school
6. Group or classroom behavior modification programs in which the behavior of a group is monitored and reinforced
7. Token economy systems in which all members of a group or classroom participate in a system of earning tokens, points, or scrip for the behavior of the group as a whole

Table 24

*Assessment of Best Practices With Respect to Methods: Counseling, Social Work, Psychological or Therapeutic Activity*

1. Formal assessments are *sometimes, usually, or always* made to understand or diagnose the individual person or his or her situation
2. A written diagnosis or problem statement is *always* prepared for each participant
3. Written treatment goals are *always* developed for each participating student
4. The student *usually or always* agrees to a treatment plan contract
5. A contract to implement a treatment plan is *always* agreed to by the client
6. Individual goals depend on individual needs as indicated by assessment
7. If referrals are made, the service provider is contacted to verify that service was provided, or the service provider is contacted periodically to monitor the client's progress
8. The counseling or social work plans *always* include a method of monitoring or tracking student behavior over time

### Frequency of Staff Participation

For some program types, frequency of staff participation provided a measure of extent of use. Scores range from 1 to 6 as follows: 1 = monthly or less frequently, 2 = 2 or 3 times a month, 3 = weekly, 4 = more than once a week, 5 = daily, 6 = more than once a day.

### Level of Use by School Personnel

Level of use of a program, activity, or arrangement was viewed as a continuum following the conceptualization provided by Hall and Loucks (1977). The continuum ranges from no knowledge or awareness of an activity, through having acquired information or training, trying the activity, to using or applying regularly. Respondents indicated the level of use that characterized use of the practice in their school in response to the following item (adapted for each program type):

> Which of the following best describes the level of use of this ________ in your school? (*Mark one.*)
>
> ☐ At least one person in the school knows something about it. (1)
>
> ☐ At least one person in the school has obtained information about it. (2)
>
> ☐ One or more persons has been trained in it. (3)

☐ One or more persons is conducting this _________ from time to time. (4)

☐ One or more persons is conducting this __________ on a regular basis. (5)

Level of use is important in assessing program quality because only programs at a relatively high point on this scale can possibly affect anything.

**Degree of Student Exposure**

Assessment of the degree of student exposure to preventive activity or interventions is important in assessing program quality, because programs to which students have little exposure are unlikely to make a big difference in outcomes for students. Four indicators of student exposure were examined – duration, frequency of student participation, proportion of students exposed or participating, and ratio of providers to students in the school.

***Duration***. Activity duration is measured by the amount of time elapsed between the beginning and the end of the intervention. It is measured on a scale ranging from 1 to 7 as follows: 1 = less than a day, 2 = all completed in one day, 3 = all completed in about a week, 4 = all completed in about a month, 5 = all completed in less than half a school year, 6 = all completed in a school year, 7 = requires more than a school year to complete. Questions and response options for specific program types were adapted as necessary; when fewer response options were used responses were rescaled using this 1 to 7 scale.

***Frequency of student participation.*** Another measure of degree of student exposure is frequency of student participation for those students who do participate. Frequency of the typical student's participation is placed on a scale of 1 to 6, where 1 = monthly or less often, 2 = 2 or 3 times a month, 3 = weekly, 4 = more than once a week, 5 = daily, and 6 = more than once a day.

***Proportion of students exposed or participating***. The ratio of the number of different students who participate in the program to the number of students in the school provides a third measure of degree of student exposure to the program or activity. This ratio was not available for the program type that involves youth participation in regulating discipline. For this category the ratio of disciplinary incidents handled by a student court or peer mediation to disciplinary incidents handled by student court, peer mediation, or the administration is used; and the ratio is better interpreted as a proportion of disciplinary proceedings involved in the program.

***Ratio of providers to students in the school***. A final crude indicator of degree of student exposure is the ratio of persons implementing the program to the total number of students in the school. The ratio is natural log transformed because of its skewed distribution.

A summary of the measures of program quality is provided in Table 25.

Table 25
*Summary of Measures of Program Quality*

| Quality Measure | Range of Responses | |
|---|---|---|
| Technical quality | | |
| Best practices: methods | 0 to 1 | Proportion of the identified best practices (methods) reportedly used in a particular activity or program. |
| Best practices: content | 0 to 1 | Proportion of the identified best practices (content) reportedly used in a particular activity or program. |
| Number of lessons/sessions | Write-in of the number (natural log of the number is also examined due to positive skew in the distribution of the number) | |
| Extent of use | | |
| Frequency of operation | 1 | Special occasions once or twice a year |
| | 3 | Continually throughout the year |
| Frequency of participation – staff | 1 | Monthly or less often |
| | 6 | More than once per day |
| Level of use by school personnel | 1 | At least one person in the school knows something about it |
| | 5 | One or more persons is conducting activity on a regular basis |
| Degree of student exposure | | |
| Duration | 1 | Less than a day |
| | 7 | More than a full school year |
| Frequency of participation – students | 1 | Monthly or less often |
| | 6 | More than once per day |
| Proportion students exposed or participating | Generally, $N_e/N_s$, where $N_e$ = number of students exposed or participating, and $N_s$ = number of students in the school. For the category "Youth Participation in School Decision Making," $N_e$ = disciplinary incidents handled by student court or peer mediation, and $N_s$ = disciplinary incidents handled by student court, peer mediation, or the administration. | |
| Ratio of providers to students in the school | $100(\ln(N_p/N_s + 1))$, where $N_p$ = number of persons providing the service, and $N_s$ = the number of students in the school | |

**A Summary Index of Quality**

Because there are so many specific measures of program quality, it seemed desirable to devise an overall summary index of program quality. Composing such an index is challenging in view of the variability in what can be measured across program types. It is also challenging because programs of different types may require different "dosages" or intensity to produce measurable effects. For example, our integration of the research literature evaluating prevention curriculum or instruction programs implies that effects are usually not substantial unless the intervention involves 16 or more lessons. In contrast, evaluations of improvements to instructional practices or methods that involve fewer than six weeks (30 days) usually seem to have minimal effects. And, the single evaluation suggesting substantial effects of a mentoring program involved weekly contact for a full year (about 52 sessions). Finally, composing such an index is challenging because measures of technical quality, extent of use, and student exposure tend to have small correlations with each other. Accordingly, a summary index will not constitute a homogeneous scale. Despite these difficulties, a summary index was constructed by depending on the dimensions or categories and decision rules described in Table 26. The score for any specific program or activity is the proportion of applicable criteria in Table 26 that the program meets or exceeds. A program with a summary index of activity quality equal to .70 meets 70% of the quality criteria.

Table 26
*Criteria Used to Compose Summary Index of Program or Activity Quality*

| Dimension and category | Criterion |
|---|---|
| Best practices: methods (all program types) | ≥ 70% or more of identified practices |
| Best practices: content (all program types) | ≥ 70% or more of identified practices |
| Number of lessons/sessions | |
| Prevention curriculum, instruction, or training | ≥ 16 sessions |
| Mentoring | ≥ 52 sessions |
| Tutoring; Recreation, enrichment, leisure | ≥ 26 sessions |
| Improvements to instructional practices/methods | ≥ 30 sessions |
| External personnel resources for classroom | ≥ 25 sessions |
| Frequency of operation (Culture, climate or expectations; Intergroup relations and school-community interaction; Planning structure or management of change; Security and surveillance)[a] | Continually throughout the year |

*continued . . .*

Table 26 (*continued*)

| Dimension and category | Criterion |
|---|---|
| Frequency of staff participation (Culture, climate or expectations; Intergroup relations and school-community interaction; Planning structure or management of change)[a] | At least 2-3 times per month |
| Level of use by school personnel (all program types) | One or more persons uses on a regular basis |
| Duration | |
| Prevention curriculum, instruction, or training; Counseling, social work, psychological, or therapeutic activity; Tutoring; Recreation, enrichment, leisure | Longer than a month |
| Mentoring | At least one school year |
| Planning structure or management of change; Security and surveillance | More than one full school year |
| Frequency of student participation | |
| Culture, climate or expectations; Intergroup relations and school-community interaction; Planning structure or management of change | At least 2-3 times per month |
| Prevention curriculum, instruction, or training; Counseling, social work, psychological, or therapeutic activity; Mentoring, tutoring, coaching, apprenticeship; Recreation, enrichment, leisure; Services/programs for family members; External personnel resources for classroom | At least weekly |
| Improvements to instructional practices or methods | More than once per week |
| Behavioral programming or behavioral modeling; Security & surveillance | At least daily |
| Proportion of students exposed or participating | |
| Culture, climate or expectations; Intergroup relations and school-community interaction | ≥ 70% of students |
| Youth participation in discipline | ≥ 10% or referrals handled by student court or through peer mediation |

*Note*. Not all dimensions contribute to the summary index for all program types. Index score is the proportion of criteria applicable to that program type that are met.

[a] This criterion is not scored for programs of types other than those listed.

## Outcomes of Quality Assessments

### Prevention Programs Involving Direct Services

Results of the assessment of program quality for gang *prevention* programs involving direct services to students, families, or staff are shown in Table 27. The top left cell in Table 27 shows that the mean summary index of activity quality for gang prevention programs in the prevention curriculum, instruction, or training category is .63, that the standard error for this estimated proportion is .017, and that the estimate is based on reports for 246 programs. Readers should exercise caution in interpreting differences in this summary index for different program types - if they should attempt such comparisons at all. Notice, for example, that as there are no assessments of the use of best practices for recreation, enrichment, and leisure activity, the use of "best practices" is not a part of the summary index for this activity. Dashes in Table 27 indicate that the facet of quality was not assessed for that program type.

The mean proportion of best practices (methods) used ranges from .35 for counseling to .54 for behavioral programming among programs involving direct services to students, families, and staff. The programs involving counseling, social work, psychological or therapeutic activity on average use only 35% of the eight practices listed in Table 24. Put another way, about three of the eight practices listed in Table 24 characterize the typical counseling program. The reader may apply his or her own judgment to evaluate this average score for best practices. In the authors' judgment, the average program is of poor quality.

The highest mean proportion of best practices (methods) score is the .54 for behavioral programming, implying that 54% of the eight practices listed in the top panel of Table 23 are used by the average program. Put another way, about four of the eight practices listed in the top panel of Table 23 characterize the average behavioral program. Again, the reader may apply her or his own judgment to evaluate this average score for best practices. In our judgment, the average program teeters on the brink of poor quality.

Similarly, the mean proportion of best practices (methods) score for instructional programs is .50, implying that half of the 10 practices listed in the top half of Table 22 are used by the average instructional program. Or, five of these ten practices characterize the average instructional program. This result implies that the average instructional program could certainly be improved by the use of better instructional methods.

Best practices with respect to content were assessed only for prevention curriculum and behavioral programming. The average proportion of best practices (content) used is quite high (.88) for instructional programs, and the average behavioral program uses .64 of the best practices. This means that the average instructional program employed about six of the seven practices listed in the bottom panel of Table 22, and that the average behavioral program used about four and a half of the 7 practices listed in the bottom panel of Table 23.

Table 27

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Prevention Programs Involving Direct Services to Students, Families, or Staff*

| | Program Type | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Prevention Curriculum, Instruction, or Training | | | Behavioral Programming or Behavior Modification | | | Counseling, Social Work, Psychological, or Therapeutic Activity | | | Mentoring, Tutoring, Coaching, Job Apprenticeship/Placement | | | Recreation, Enrichment and Leisure Activity | | | Services or Programs for Family Members | | |
| Quality indicator | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* |
| Summary index of activity quality | .63 | .017 | 246 | .48 | .030 | 136 | .46 | .023 | 230 | .56 | .029 | 101 | .58 | .041 | 118 | .44 | .038 | 114 |
| Technical quality | | | | | | | | | | | | | | | | | | |
| Best practices | | | | | | | | | | | | | | | | | | |
| Proportion, methods | .50 | .024 | 244 | .54 | .031 | 135 | .35 | .020 | 229 | .53 | .028 | 95 | – | – | – | – | – | – |
| Proportion, content | .88 | .013 | 246 | .64 | .030 | 136 | – | – | – | – | – | – | – | – | – | – | – | – |
| Number of lessons/ sessions | 28.1 | 3.75 | 200 | – | – | – | 13.4 | 1.02 | 202 | 43.7 | 7.38 | 77 | 43.5 | 8.23 | 105 | 7.9 | 2.28 | 92 |
| Number of lessons/ sessions (ln) | 2.97 | .079 | 200 | – | – | – | 2.38 | .070 | 202 | 3.26 | .198 | 77 | 3.01 | .175 | 105 | 1.62 | .116 | 92 |
| Extent of use | | | | | | | | | | | | | | | | | | |
| Level of use by school personnel | 4.01 | .114 | 241 | 4.06 | .144 | 134 | 4.10 | .130 | 229 | 4.73 | .090 | 101 | 4.16 | .142 | 114 | 3.76 | .185 | 114 |
| Degree of student exposure | | | | | | | | | | | | | | | | | | |
| Duration | 5.28 | .098 | 233 | 5.39 | .127 | 129 | 5.10 | .091 | 213 | 5.45 | .146 | 93 | 4.86 | .167 | 113 | 4.71 | .172 | 106 |
| Frequency of student participation | 3.16 | .107 | 234 | 3.98 | .219 | 126 | 2.36 | .083 | 215 | 3.37 | .192 | 93 | 3.19 | .182 | 116 | 1.93 | .182 | 105 |
| Proportion of students exposed or participating | .47 | .035 | 204 | .31 | .045 | 112 | .29 | .030 | 200 | .22 | .042 | 87 | .32 | .036 | 111 | .10 | .019 | 94 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | 2.13 | .304 | 221 | 5.26 | .876 | 125 | .96 | .117 | 227 | 8.01 | 1.708 | 98 | 4.62 | 1.113 | 105 | 2.97 | .723 | 103 |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

Results for program intensity in Table 27 are more positive. The average curricular or instructional program involves 28 lessons, which is in the range of the intensity of programs that have been found to be effective in evaluation research. The average counseling prevention activity involves 13 sessions. The mean number of sessions for typical students who are involved in mentoring and recreational activities is high – both involve 44 sessions on average. The average family program involves 8 sessions. Because of the marked positive skew for the number of sessions/lessons, the mean is higher than the median for this variable.

The level of use indicator implies that for most of the direct service program types, "one or more persons is doing it from time to time" characterizes the level of use (about a 4 on the 1 to 5 scale explained earlier). The average mentoring/tutoring/coaching program achieves a higher level of use, and services for family members have a lower level of use.

The average scores of around 5 for duration mean that the activities are completed in less than half a school year on average. The 5.45 duration score for mentoring means that the average mentoring program lasts between "less than half a year" (5) and a full school year (6).

The highest average frequency of student participation is observed for behavioral programming; the mean = 3.98 implying that in the average behavioral program the typical program participant participates more than once a week. In contrast in the average family services program, the typical family participates about twice monthly.

The proportion of students (or students' families) exposed or participating ranges from a low of .10 for family services to a high of .47 for curricular/instructional programs. Whereas the families of about one student in 10 receive services from the average family program, almost half of all students participate in prevention curriculum, instruction or training.

There are proportionately more providers of mentoring/tutoring/coaching per student in the school (about one for every 11 students) than there are providers of instructional programs (about one for every 50 students), but there are of course many fewer mentoring/tutoring/coaching programs than there are instructional/curricular programs (see Table 19).

### Prevention Programs Involving Organizational or Environmental Arrangements

Results of the assessment of quality for prevention programs involving organizational or environmental arrangements are summarized in Table 28. The technical quality of interventions directed at improving classroom organization and management practices is relatively high with average scores implying that 77% of best practices (methods) and 74% of best practices (content) are used by the average classroom organization program. Improvements in instructional practices produce a relatively intense intervention with the average number of lessons/sessions of about 164. In contrast, the use of external personnel in the classroom produces a less intense intervention with an average of only 10 lessons/sessions.

Table 28

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Prevention Programs Involving Organizational or Environmental Arrangements*

| | Program Type | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Improvements to Instructional Practices or Methods | | | Classroom Organization and Management Practices | | | Activity to Change or Maintain Culture, Climate or Expectations for Behavior | | | Intergroup Relations and School-Community Interaction | | | Interventions Involving a School Planning Structure or Process to Manage Change | | | Use of External Personnel Resources for Classroom Management and Instruction | | |
| Quality indicator | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* |
| Summary index of activity quality | .66 | .036 | 78 | .78 | .040 | 85 | .69 | .030 | 174 | .56 | .038 | 113 | .73 | .036 | 93 | .50 | .028 | 179 |
| Technical quality | | | | | | | | | | | | | | | | | | |
| Best practices: methods | .62 | .039 | 77 | .77 | .025 | 84 | - | - | - | - | - | - | - | - | - | - | - | - |
| Best practices: content | .68 | .042 | 78 | .74 | .041 | 85 | - | - | - | - | - | - | - | - | - | - | - | - |
| Number of lessons/ sessions | 163.8 | 57.56 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | 9.92 | .786 | 146 |
| Number of lessons/ sessions (ln) | 4.16 | .303 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | 2.04 | .098 | 146 |
| Extent of use | | | | | | | | | | | | | | | | | | |
| Frequency of operation | 2.82 | .052 | 75 | 2.91 | .057 | 83 | 2.75 | .063 | 171 | 2.58 | .094 | 110 | 2.72 | .066 | 91 | 2.48 | .056 | 169 |
| Frequency of staff participation | - | - | - | - | - | - | 2.97 | .201 | 136 | 2.65 | .233 | 82 | 3.07 | .248 | 90 | - | - | - |
| Level of use by school personnel | 4.65 | .112 | 77 | 4.72 | .101 | 84 | 4.25 | .147 | 174 | 4.02 | .189 | 113 | 4.59 | .108 | 91 | 4.25 | .120 | 164 |
| Degree of student exposure | | | | | | | | | | | | | | | | | | |
| Duration | - | - | - | - | - | - | - | - | - | - | - | - | 6.64 | .106 | 90 | - | - | - |
| Frequency of student participation | 4.21 | .232 | 75 | - | - | - | 2.99 | .200 | 157 | 2.56 | .167 | 100 | 2.98 | .239 | 71 | 2.96 | .151 | 165 |
| Proportion of students exposed or participating | .58 | .066 | 62 | - | - | - | .70 | .038 | 143 | .48 | .054 | 78 | - | - | - | .31 | .029 | 154 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | 4.32 | .353 | 71 | 4.66 | .833 | 79 | 4.25 | .456 | 167 | 3.55 | .524 | 102 | - | - | - | - | - | - |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

Frequency of operation for these organizational or environmental programs tends to be extensive, with average scores ranging from 2.5 to 2.9 on a scale where 2 means a portion of the school year and 3 means throughout the entire school year.

Average level of use scores range from about 4.0 to 4.7 on a scale where 4 means one or more persons conducts the activity from time to time and 5 means one or more persons conduct the activity regularly. Staff are not very frequently engaged in the activities of the typical program, with the average score for frequency of staff participation ranging from 2.6 to 3.1 where 3 means weekly staff participation. Frequency of staff participation is highest (mean = 3.1) for planning programs, for which the duration measure shows that the average planning program lasts more than an entire school year.

These environmental programs have the potential to influence a large fraction of a school's students. Programs creating a distinctive culture or climate for interactions on average involve or expose 70% of the schools' students - a larger percentage than any other program type. At the other extreme, programs involving the use of external personnel in the classroom expose only 31% of students to the program.

### Prevention Programs Involving Discipline or Safety Management Activities

Results of the assessment of quality for discipline and safety management activities are presented in Table 29. The table shows that on average security and surveillance programs meet 70% of the quality criteria. The score of .74 for best practices (methods) for security and surveillance programs means that the average program has written rules and procedures for over five of the following seven activities: parents visiting teachers, reporting intruders to the office, monitoring potential trouble spots (e.g., restrooms, cafeteria), monitoring during likely times of disturbance (e.g., dismissal, changing of classes), requirements that visitors carry passes, visitor sign-in, and visitor sign-out.

Respondents generally indicate that security or surveillance activities operate continuously throughout the year (frequency of operation score = 2.91) although not all activities do so (the average score is less than 3.0). Somewhat surprisingly, the average program has a frequency of staff participation that is intermediate between weekly and more than once a week (frequency score = 3.6) and the level of use average implies that the average program is at a higher level than *someone has been trained* but below *at least one person does this from time to time*.

The distributions for the quality measures for security and surveillance programs tend to have a negative skew. Almost a quarter of the programs (23.5%) meet all of the quality criteria and earn a summary index of 1.0. But over a quarter of the programs (26.2%) meet half or fewer of the quality criteria. Figure 2 shows the distribution of scores on the summary index of program quality. In some schools with security programs, the programs are poor. Figure 3 shows the distribution of scores on the level of use measure. Notice that the distribution is bi-modal (or tri-modal) with at least some persons operating the program on a regular basis in

Table 29

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Prevention Programs Involving Discipline or Safety Management Activities*

| | Program Type | | | | | |
|---|---|---|---|---|---|---|
| | Security and Surveillance | | | Youth Participation in School Discipline | | |
| Quality indicator | Est. | *SE* | *n* | Est. | *SE* | *n* |
| Summary index of activity quality | .70 | .028 | 159 | .68 | .062 | 80 |
| Technical quality | | | | | | |
| Best practices: methods | .74 | .033 | 157 | – | – | – |
| Extent of use | | | | | | |
| Frequency of operation | 2.91 | .048 | 152 | 2.72 | .110 | 71 |
| Frequency of staff participation | 3.60 | .295 | 91 | – | – | – |
| Level of use by school personnel | 3.83 | .148 | 156 | 4.18 | .187 | 80 |
| Degree of student exposure | | | | | | |
| Duration | 6.21 | .230 | 151 | – | – | – |
| Frequency of student participation | 3.58 | .244 | 122 | – | – | – |
| Proportion of students exposed or participating | – | – | – | .34 | .080 | 33 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | – | – | – | 1.81 | .590 | 70 |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

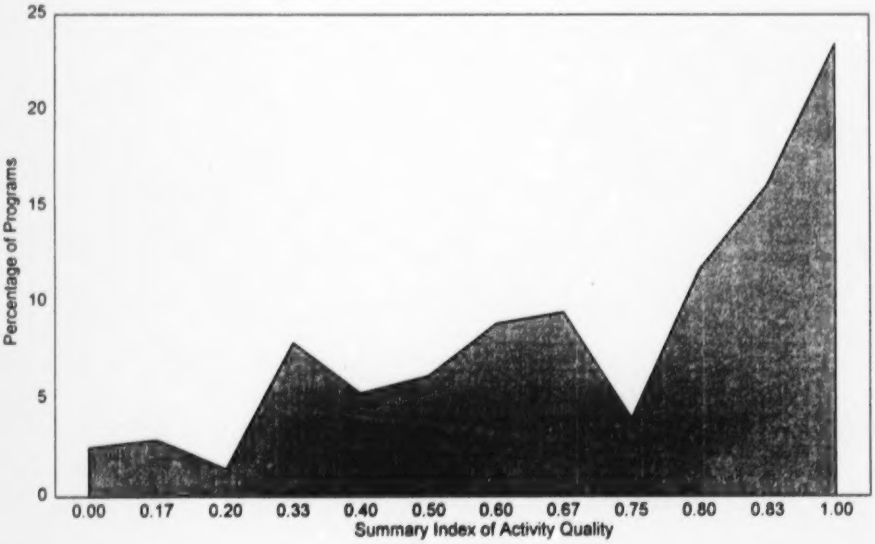


Figure 2. Percentage Distribution of Summary Index of Activity Quality for Security and Surveillance Programs Showing Marked Negative Skew: *M* = .70, *Mdn* = .80

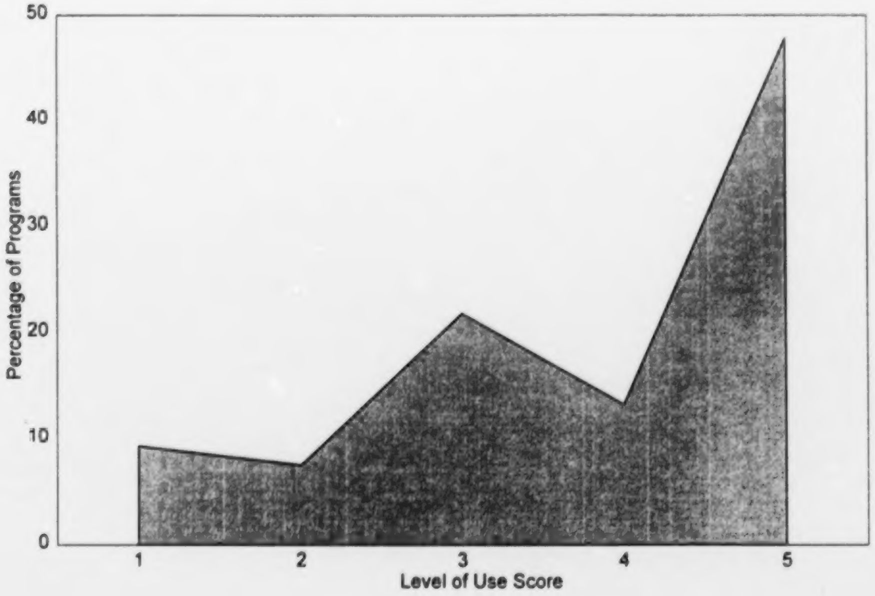


Figure 3. Percentage Distribution of Level of Use Scores for Security and Surveillance Programs Showing Negative Skew: *M* = 3.8, *Mdn* = 4.0.

almost half of the programs (47.9%), but with a secondary peak at the level of *someone has been trained*, and a third minor peak at the level of *at least one person knows about it*.

**Intervention Programs Involving Direct Services**

A smaller number of programs are gang intervention programs – programs that directly target gang members. In broad terms, the quality of gang intervention programs resembles the quality of prevention programs. The most common type of gang intervention program involves counseling, social work, psychological, or therapeutic intervention. Table 30 shows that the summary index of activity quality for counseling interventions is .53 indicating that the average counseling intervention met 53% of the quality criteria for this type of program. On the more specific quality criteria, counseling interventions resemble (but often appear marginally stronger) than the prevention programs involving counseling (cf. Table 27).

The quality measures for other direct service intervention program types also resemble the measures for prevention programs. Overall, the quality of intervention services to family members is marginally higher that prevention services to families and the quality of intervention programs involving mentoring or tutoring is marginally lower than this type of service in prevention programs overall.

Table 30

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Intervention Programs Involving Direct Services to Students, Families, or Staff*

| | Program Type | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Prevention Curriculum, Instruction, or Training | | | Behavioral Programming or Behavior Modification | | | Counseling, Social Work, Psychological, or Therapeutic Activity | | | Mentoring, Tutoring, Coaching, Job Apprenticeship/Placement | | | Recreation, Enrichment and Leisure Activity | | | Services or Programs for Family Members | | |
| Quality indicator | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* |
| Summary index of activity quality | .64 | .049 | 46 | .49 | .049 | 48 | .53 | .028 | 98 | .44 | .034 | 32 | .52 | .108 | 18 | .54 | .056 | 44 |
| Technical quality | | | | | | | | | | | | | | | | | | |
| Best practices | | | | | | | | | | | | | | | | | | |
| Proportion, method | .56 | .056 | 46 | .58 | .063 | 48 | .44 | .039 | 98 | .51 | .042 | 31 | – | – | – | – | – | – |
| Proportion, content | .81 | .049 | 46 | .66 | .051 | 47 | – | – | – | – | – | – | – | – | – | – | – | – |
| Number of lessons/ sessions | 38.6 | 13.92 | 38 | – | – | – | 15.9 | 2.68 | 89 | 29.8 | 8.14 | 25 | 40.2 | 16.06 | 18 | 6.27 | 1.17 | 35 |
| Number of lessons/ sessions (ln) | 3.10 | .286 | 38 | – | – | – | 2.47 | .119 | 89 | 2.97 | .267 | 25 | 2.78 | .444 | 18 | 1.76 | .134 | 35 |
| Extent of use | | | | | | | | | | | | | | | | | | |
| Level of use by school personnel | 4.17 | .185 | 44 | 4.14 | .268 | 47 | 4.52 | .163 | 97 | 4.60 | .195 | 32 | 4.27 | .349 | 18 | 3.58 | .354 | 44 |
| Degree of student exposure | | | | | | | | | | | | | | | | | | |
| Duration | 5.26 | .274 | 43 | 5.26 | .260 | 47 | 5.16 | .146 | 92 | 5.39 | .335 | 31 | 4.32 | .555 | 18 | 5.24 | .238 | 41 |
| Frequency of student participation | 3.18 | .257 | 43 | 4.28 | .300 | 45 | 2.38 | .140 | 94 | 3.05 | .267 | 31 | 2.92 | .433 | 18 | 2.29 | .389 | 40 |
| Proportion of students exposed or participating | .42 | .068 | 36 | .24 | .058 | 42 | .22 | .032 | 90 | .25 | .074 | 27 | .29 | .102 | 17 | .11 | .028 | 39 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | 1.80 | .477 | 43 | 4.06 | .735 | 44 | 1.01 | .208 | 97 | 6.39 | 1.45 | 32 | 4.77 | 1.022 | 18 | 4.51 | 1.393 | 40 |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

Curricular gang intervention programs can be characterized as follows:

- One or more persons is conducting it *from time to time*;
- It employs 81% of the *content* elements identified as representing best practices;
- It employs 56% of the *methods* elements identified as representing best practices;
- It involves 39 sessions or lessons;
- It lasts about 23 weeks;
- Students participate once per week or slightly more often;
- 42% of the school's students participate or are exposed (obviously including other students in addition to gang members in most cases).

The average *intervention* program involving services for family members resembles the quality of the average *prevention* program of this type, although duration of the intervention is somewhat longer on average.

### Intervention Programs Involving Organizational or Environmental Arrangements

Average quality measures for gang intervention programs involving organizational or environmental arrangements are displayed in Table 31.[3] In some respects the quality of gang intervention programs involving classroom organization and management, improvements to instructional methods, or the involvement of youths in school discipline is somewhat higher than gang prevention programs of the same type (cf. Table 28).

Of the kinds of programs that have been the subject of research the typical activity implemented in schools does not compare favorably with the characteristics of effective programs. An exception is classroom organization and management interventions directed at gang members, which make use of a high proportion of best practices and are sometimes used regularly by school personnel; but this type of intervention is rarely used.

### Intervention Programs Involving Discipline or Safety Management Activities

Average quality measures for the small number of gang intervention programs involving youth participation in school discipline (e.g., peer mediation programs) are shown in Table 32.

---

[3] Respondents were asked whether activities target gang members for 11 of the 14 discretionary program categories – excluding school planning, external personnel in classrooms, and security or surveillance.

Table 31

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Intervention Programs Involving Organizational or Environmental Arrangements*

| | Program Type | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Improvements to Instructional Practices or Methods | | | Classroom Organization and Management Practices | | | Activity to Change or Maintain Culture, Climate or Expectations for Behavior | | | Intergroup Relations and School-Community Interaction | | |
| Quality indicator | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* | Est. | *SE* | *n* |
| Summary index of activity quality | .61 | .091 | 24 | .83 | .070 | 19 | .60 | .088 | 37 | .51 | .075 | 35 |
| Technical quality | | | | | | | | | | | | |
| Best practices: methods | .57 | .056 | 24 | .87 | .045 | 19 | – | – | – | – | – | – |
| Best practices: content | .72 | .086 | 24 | .85 | .073 | 19 | – | – | – | – | – | – |
| Number of lessons/ sessions | 236.0 | 151.08 | 16 | – | – | – | – | – | – | – | – | – |
| Number of lessons/ sessions (ln) | 4.50 | .618 | 16 | – | – | – | – | – | – | – | – | – |
| Extent of use | | | | | | | | | | | | |
| Frequency of operation | 2.78 | .152 | 24 | 2.84 | .168 | 19 | 2.66 | .182 | 37 | 2.38 | .218 | 35 |
| Frequency of staff participation | – | – | – | – | – | – | 2.90 | .446 | 34 | 2.41 | .438 | 26 |
| Level of use by school personnel | 4.67 | .177 | 23 | 4.64 | .239 | 19 | 4.13 | .349 | 37 | 3.96 | .377 | 35 |
| Degree of student exposure | | | | | | | | | | | | |
| Proportion of students exposed or participating | .43 | .079 | 20 | – | – | – | .70 | .082 | 28 | .54 | .102 | 26 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | 3.96 | .628 | 23 | 3.50 | 1.198 | 19 | 3.28 | .650 | 33 | 4.58 | 1.233 | 34 |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

Table 32

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Intervention Programs Involving Discipline or Safety Management Activities*

| | Youth Participation in School Discipline | | |
|---|---|---|---|
| Quality indicator | Est. | *SE* | *n* |
| Summary index of activity quality | .86 | .085 | 10 |
| Extent of use | | | |
| Frequency of operation | 3.00 | - | 10 |
| Level of use by school personnel | 4.83 | .154 | 10 |
| Degree of student exposure | | | |
| Proportion of students exposed or participating | .23 | .148 | 5 |
| Ratio of providers to students in school [100 (ln (ratio + 1))] | 1.04 | .342 | 10 |

*Note.* Duration ranges from 1 (less than a day) to 7 (more than one full school year). Frequency of participation ranges from 1 (monthly or less often) to 6 (more than once a day). Level of use ranges from 1 (at least one person in school knows about activity) to 5 (one or more persons is conducting activity on a regular basis). Frequency of operation ranges from 1 (special occasions once or twice a year) to 3 (continually throughout school year). Est. = weighted estimate, *SE* = standard error of estimate, *n* = unweighted number of activity descriptions.

This small set of programs appears to be of high average quality. Note, however, that (a) only a tiny number (ten) of programs of this kind are found in our sample and (b) we do not have measures of technical quality (use of best practices or intensity in terms of number of sessions). Nevertheless, the average youth participation program meets 86% of the quality criteria, is operated continually throughout the year, has a high level of use by school personnel (4.8 on a scale of 1 to 5, where 5 means that at least one person conducts the activity on a regular basis). A relatively small percentage (23%) of the average school's students participates in these programs, however.

## Summary

In general, the characteristics of gang prevention and intervention programs found operating in schools does not compare favorably on average with the characteristics of programs that have been studied and found to produce evidence of effectiveness in research – insofar as comparisons are possible. This parallels the outcomes of an earlier examination (G. D. Gottfredson et al., 2000) of school based delinquency prevention programs in general. Nevertheless there is great variation in the quality of programs found in schools, and the range of quality includes programs that appear sound and of high quality. There is clearly much room for improvement in the quality of gang prevention and intervention programs in schools.

# 9. Participation in Prevention or Intervention Activities by Gang Involved and Other Youths

The link between delinquent behavior and school dropout is well established (Bachman, O'Malley, & Johnston, 1978; D. C. Gottfredson, 2001; G. D. Gottfredson, 1981). Young persons who engage in relatively much delinquent behavior are more likely than less delinquent individuals to drop out of school. The same literature has equally established a link between delinquent behavior and poor school attendance. Accordingly, we can be certain that some school-aged gang members have left school or are not in school and so cannot benefit from school-based gang prevention or intervention programs – and are not included in our sample.

The extent to which school-based programs reach persons who are still in school and who are involved with gangs is an important question that we can examine with data from the present study. In middle and high schools we asked students to tell us whether they had participated in or been exposed to a variety of prevention or intervention activities or programs. The questions allow an examination of the extent of exposure to prevention activities using the same classification introduced in the first chapter. In addition we asked about participation in specific "brand name" programs (Drug Abuse Resistance Education or D.A.R.E, and Gang Resistance Education and Training or G.R.E.A.T), and about other school organizational, school compositional, and referral activities often directed at reducing problem behavior.

Results showing rates of participation in different activities or programs for boys who are and are not gang members are presented in Table 33. Parallel results for girls are shown in Table 34. For many types of activity or program, gang members participate or are exposed at lower levels than are non-members. Significantly smaller percentages of gang boys received instruction about ways to avoid getting involved in behavior such as fighting, drug use, or risky behavior; and significantly smaller percentages of boys participated in D.A.R.E. instruction.

More gang involved boys and girls participated in G.R.E.A.T, but the difference is statistically significant only for girls. This is probably a product of the deliberate selection of schools with gang problems for the implementation of the G.R.E.A.T. program. Gang girls (but not gang boys) got significantly more advice or guidance about ways to avoid getting in trouble from a counselor, social worker or psychologist at school.

Gang boys and girls are much less likely than non-gang boys and girls to have participated in events or activities outside the school. The difference is large (25% for boys and 24% for girls) and highly statistically significance. Gang members – boys and girls – less often report being in a class characterized by good classroom management and organization, which is reflected in such things as clear rules, good use of class time, and signals to signal transitions. Again the difference is large (22% for both boys and girls) and highly statistically significant.

Table 33

*Percentage of Males Reporting Participation in Activities or Programs This Year in School by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| This year at school . . . | % | *SE* | *n* | % | *SE* | *n* |
| Did you receive instruction in ways to avoid getting involved in problem behavior such as fighting, drug use, or risky behavior? | 39 | 3.5 | 547 | 49 | .9 | 6687 |
| Did someone chart your behavior over time, help you set goals, and give you information about how close you were coming to the goal or give you rewards or punishment for your behavior? | 24 | 2.6 | 545 | 28 | 1.0 | 6674 |
| Did you participate in Drug Abuse Resistance Education (D.A.R.E.) taught by a police officer in your school? | 33 | 3.4 | 543 | 40 | 1.2 | 6664 |
| Did you participate in Gang Resistance Education and Training (G.R.E.A.T.) taught by a police officer in your school? | 16 | 3.0 | 543 | 11 | .9 | 6664 |
| Did you get advice or guidance about ways to avoid getting into trouble – or avoid getting involved with drugs or violence – from a counselor, social worker, or psychologist at school? | 29 | 3.3 | 544 | 35 | .9 | 6658 |
| Did you spend time with an adult mentor or tutor who talked with you about things, offered you help with problems you might be having or helped you with your school work? | 28 | 2.6 | 545 | 33 | 1.1 | 6655 |
| Did you participate in special events, activities, or recreation inside or outside the school; or take trips outside the school to places for fun or for learning? | 44 | 3.2 | 541 | 69 | 1.0 | 6647 |
| Were you in a class where the teacher made the rules very clear at the beginning of the year, posted the rules on the wall, had something for you to begin work on every day when you arrived at class, and had special signals everyone understood to begin and end activities? | 44 | 3.0 | 540 | 66 | 1.0 | 6645 |

*continued . . .*

Table 33 (*continued*)

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| This year at school . . . | % | *SE* | *n* | % | *SE* | *n* |
| Did you notice posters, videos, or repeated announcements trying to get students to behave a certain way or to avoid certain behavior in your school? | 37 | 2.9 | 543 | 57 | 1.2 | 6645 |
| Were you involved in school activities together with people or groups from the community? | 29 | 2.8 | 541 | 50 | 1.1 | 6630 |
| Did you notice any changes in school rules or ways of responding to student behavior at school? | 39 | 3.2 | 542 | 43 | 1.3 | 6629 |
| Did your school involve students in making rules, resolving disputes, a student court, mediation, or conflict resolution? | 29 | 2.6 | 539 | 32 | 1.2 | 6621 |
| Did your school have a team or group to make plans to improve the school? | 33 | 3.0 | 540 | 47 | 1.3 | 6626 |
| Did your school formally involve students, parents, or others from outside the school in making plans for the school? | 30 | 3.0 | 543 | 39 | 1.3 | 6626 |
| Does your school take steps to make it difficult for intruders to enter the school; watch the school's entrances, hallways and grounds; or make it easy to report a problem? | 28 | 2.8 | 541 | 40 | 1.5 | 6618 |
| Did your school work with any adult in your family to help the family supervise children or reduce behavior problems? | 27 | 2.5 | 541 | 21 | .9 | 6631 |
| Do some people who want to go to your school have to go somewhere else because the school does not accept everyone who wants to attend? | 27 | 2.7 | 542 | 23 | 1.6 | 6620 |
| Were you or your family sent by the school to another agency to get help of any kind? | 20 | 2.6 | 540 | 10 | .6 | 6628 |
| Is your school divided into smaller groups of students (instructional teams, houses, academies) who spend most of their learning time with one group of teachers and who are usually separated from other students who have other groups of teachers. | 31 | 2.9 | 541 | 26 | 1.2 | 6629 |

*Note:* % = weighted estimate of the percentage of students participating in the activity or program. *SE* = standard error of estimate, *n* = unweighted number of respondents. Table excludes respondents whose responses are undependable according to the Veridicality index.

Table 34

*Percentage of Females Reporting Participation in Activities or Programs This Year in School by Self-Reported Gang Involvement*

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| This year at school . . . | % | *SE* | *n* | % | *SE* | *n* |
| Did you receive instruction in ways to avoid getting involved in problem behavior such as fighting, drug use, or risky behavior? | 41 | 4.4 | 329 | 46 | 1.3 | 7532 |
| Did someone chart your behavior over time, help you set goals, and give you information about how close you were coming to the goal or give you rewards or punishment for your behavior? | 29 | 3.1 | 326 | 28 | .9 | 7525 |
| Did you participate in Drug Abuse Resistance Education (D.A.R.E.) taught by a police officer in your school? | 33 | 3.9 | 326 | 37 | 1.4 | 7512 |
| Did you participate in Gang Resistance Education and Training (G.R.E.A.T.) taught by a police officer in your school? | 13 | 2.4 | 327 | 8 | .8 | 7514 |
| Did you get advice or guidance about ways to avoid getting into trouble - or avoid getting involved with drugs or violence - from a counselor, social worker, or psychologist at school? | 42 | 3.8 | 325 | 34 | 1.1 | 7510 |
| Did you spend time with an adult mentor or tutor who talked with you about things, offered you help with problems you might be having or helped you with your school work? | 30 | 3.5 | 324 | 36 | 1.0 | 7526 |
| Did you participate in special events, activities, or recreation inside or outside the school; or take trips outside the school to places for fun or for learning? | 51 | 4.2 | 326 | 75 | 1.2 | 7517 |
| Were you in a class where the teacher made the rules very clear at the beginning of the year, posted the rules on the wall, had something for you to begin work on every day when you arrived at class, and had special signals everyone understood to begin and end activities? | 54 | 4.3 | 325 | 76 | .8 | 7505 |

*continued . . .*

Table 34 (*continued*)

| | Gang involved | | | Not involved | | |
|---|---|---|---|---|---|---|
| This year at school . . . | % | *SE* | *n* | % | *SE* | *n* |
| Did you notice posters, videos, or repeated announcements trying to get students to behave a certain way or to avoid certain behavior in your school? | 47 | 4.2 | 322 | 63 | 1.2 | 7503 |
| Were you involved in school activities together with people or groups from the community? | 36 | 3.7 | 324 | 58 | 1.2 | 7497 |
| Did you notice any changes in school rules or ways of responding to student behavior at school? | 42 | 3.8 | 326 | 44 | 1.1 | 7512 |
| Did your school involve students in making rules, resolving disputes, a student court, mediation, or conflict resolution? | 24 | 3.2 | 323 | 33 | 1.4 | 7502 |
| Did your school have a team or group to make plans to improve the school? | 38 | 3.4 | 324 | 46 | 1.1 | 7497 |
| Did your school formally involve students, parents, or others from outside the school in making plans for the school? | 31 | 3.7 | 322 | 40 | 1.2 | 7490 |
| Does your school take steps to make it difficult for intruders to enter the school; watch the school's entrances, hallways and grounds; or make it easy to report a problem? | 32 | 4.6 | 323 | 40 | 1.4 | 7485 |
| Did your school work with any adult in your family to help the family supervise children or reduce behavior problems? | 19 | 2.8 | 321 | 15 | .7 | 7490 |
| Do some people who want to go to your school have to go somewhere else because the school does not accept everyone who wants to attend? | 24 | 3.2 | 322 | 21 | 1.3 | 7488 |
| Were you or your family sent by the school to another agency to get help of any kind? | 14 | 2.8 | 324 | 7 | .5 | 7487 |
| Is your school divided into smaller groups of students (instructional teams, houses, academies) who spend most of their learning time with one group of teachers and who are usually separated from other students who have other groups of teachers. | 30 | 4.1 | 324 | 26 | 1.2 | 7484 |

*Note:* % = weighted estimate of the percentage of students participating in the activity or program. *SE* = standard error of estimate, *n* = unweighted number of respondents. Table excludes respondents whose responses are undependable according to the Veridicality index.

Gang members – both boys and girls – much less often report having noticed posters, videos, or repeated announcements trying to get students to behave in a certain way or to avoid certain behavior in school than do non-gang students. The difference is again large – 20% for boys and 16% for girls – and highly statistically significant.

Gang members are also much (and highly significantly) less likely to report having been involved in school activities together with people or groups from the community – 29% of gang boys versus 50% of non-gang boys and 36% of gang girls versus 58% of non-gang girls.

Gang members report less student involvement in making rules, resolving disputes, mediation, or conflict resolution than do non-gang members, but the difference is significant and substantial only for girls. Smaller percentages of gang boys and girls report that their school has a planning group to improve the school; and smaller percentages of gang involved boys and girls report that the school involves students, parents, or others from outside the school in making plans.

A much smaller percentage of gang boys than of boys who are not gang members report that the school takes steps to make it difficult for intruders to enter the school; watch the school's entrances, hallways and grounds; or make it easy to report a problem. The difference is large (28% of gang boys reporting that the school has taken such steps versus 40% of non-gang boys) and highly statistically significant. Gang girls also tend less often than non-gang girls to report that their schools have taken steps to promote security in these ways, but the difference between gang and non-gang girls is not statistically significant ($p < .10$).

Gang members are somewhat more likely than other students to report some school involvement with their families: 27% of gang boys but 21% of non-gang boys report that the school worked with an adult in the family to help the family supervise children or reduce behavior problems ($p < .01$, the difference between gang and non-gang girls is in the same direction but not significant). More gang boys and gang girls report that they or their families were sent by the school to another agency to get help – a 10% difference for boys and a 7% difference for girls, both differences statistically significant.

With few exceptions, gang members are less often exposed to the activities examined here. To the extent that an activity fails to reach or involve gang members or potential gang members, the activity will have diminished influence on levels of gang problems. The effects of school-based delinquency prevention programs typically are relatively small (D. C. Gottfredson et al., in press) and this is also true of one of the most popular programs specifically marketed as a school-based *gang* prevention program (Esbensen & Osgood, 1999; Esbensen, Osgood, Taylor, Peterson, & Freng, in press). In the context of the results presented in earlier chapters about the imperfect quality of much programming that is implemented, it appears that multiple factors may converge in limiting the likely effectiveness of current gang prevention activity in schools.

## 10. Needs Assessment and Program Quality

In recent recommendations on youth gang programs, Howell (2000) noted that denial that gang problems exist precludes early intervention - and that responses to gangs should begin with an assessment of the specific gangs, the crimes they commit, the problems they present, and the localities they affect. And among the findings of the National Study of Delinquency Prevention in Schools (G. D. Gottfredson et al., 2000) is that more extensive local planning and involvement in decisions about what to implement is associated with better quality implementation of prevention programs. Accordingly, we expected to find a link between the use of formal needs assessment and the quality of gang prevention or intervention programs. In this section we examine the data on this potential link.

Program coordinators were asked to indicate the sources of information used to select the prevention program or practice for the school, with one of the potential sources being, "formal needs assessment (e.g. collection or compilation of data to identify areas for improvement) done specifically for your school." Among gang prevention or intervention programs, 45.9% indicated that such a formal needs assessment was a basis for program selection. Experience implies that high quality needs assessments are rare in schools, so this may seem to be a surprisingly high percentage.[4] Reflection, however, suggests that it has become so common for state and local education agencies, foundations, and government funders large and small to require supplicants to justify the "need" for programs and so many proposals contain perfunctory needs assessments that this may not be surprising after all. Oftentimes these needs assessments are largely off topic - reciting census data on community ethnic composition and numbers of students receiving free or reduced lunch, for example, but with little or no data on crime, delinquency, or matters more closely related to the purpose of the program. We have no way of knowing how many of the needs assessments to which program coordinators referred are based on careful, pertinent inquiry and how many are based on indifferent or unfocused assessments.

We find evidence, however, that programs developed following a formal needs assessment are implemented in stronger form than those not based on a needs assessment. Table 35 summarizes the average quality measures for programs with and without needs assessments. Programs guided by a needs assessment are of higher overall quality, of longer duration, make more use of best practices with respect to methods employed, involve a larger proportion of students, and achieve a higher level of use by school personnel.

Table 36 shows that school gang prevention or intervention programs are more likely to have been developed following a formal needs assessment in schools in which the principal reports that gangs are a problem in the school than in schools in which the principal reports no problem. And the programs are more likely to target gang members (i.e., be gang intervention programs as opposed to more general prevention efforts) in schools in which the principal reports that gangs are a problem in the school.

---

[4] James C. Howell (personal communication, 25 April 2001) kindly called our attention to the likelihood that this high percentage may be - as Mark Twain said of rumors of his death - exaggerated.

Table 35

*Mean Technical Quality, Extent of Use, and Degree of Student Exposure for Gang Prevention or Intervention Programs With and Without Formal Needs Assessment in Planning*

| | No needs assessment | | Needs assessment | | |
|---|---|---|---|---|---|
| Quality indicator | *M* | $SE_M$ | *M* | $SE_M$ | $p <$ |
| Summary index of activity quality | .57 | .014 | .63 | .015 | .01 |
| Technical quality | | | | | |
| Best practices, method | .51 | .016 | .60 | .018 | .001 |
| Best practices, content | .78 | .019 | .78 | .024 | |
| Number of lessons/sessions | 36.2 | 7.19 | 31.5 | 4.31 | |
| Number of lessons/sessions (ln) | 2.71 | .077 | 2.76 | .089 | |
| Extent of use | | | | | |
| Frequency of operation | 2.70 | .036 | 2.75 | .046 | |
| Frequency of staff participation | 2.94 | .187 | 2.98 | .167 | |
| Level of use by school personnel | 4.11 | .061 | 4.37 | .055 | .01 |
| Degree of student exposure | | | | | |
| Duration | 5.29 | .075 | 5.53 | .084 | .05 |
| Frequency of student participation | 3.00 | .080 | 3.08 | .088 | |
| Proportion of students exposed or participating | .36 | .020 | .43 | .023 | .02 |
| Ratio of providers to students in school [100(ln(ratio + 1))] | 3.84 | .407 | 3.32 | .242 | |

*Note.* *M* = weighted mean, $SE_M$ = standard error of the estimated mean. Unweighted sample sizes for the summary index are 963 for no needs assessment and 755 for needs assessment programs. For other outcomes, sample sizes fall as low as 187 for subgroups because not all outcomes are measures for all program types. Attend to the size of the standard errors.

Table 36

*Percentage of Gang Prevention or Intervention Programs Based on a Formal Needs Assessment and Targeting Gang Members by Principals' Assessment of Gang Problems in School*

| | No school gang problem | | | School gang problem | | | |
|---|---|---|---|---|---|---|---|
| Percentage of programs | % | *SE* | *n* | % | *SE* | *n* | *p* < |
| Based on formal needs assessment | 43 | 2.0 | 1394 | 59 | 5.9 | 177 | .02 |
| Targeting gang members | 25 | 1.7 | 1111 | 40 | 6.2 | 139 | .03 |

*Note.* % = weighted percentage, *SE* = standard error of the estimated percentage, *n* = unweighted sample size.

# 11. Discussion and Limitations

## Limitations of the Research

An important limitation of the research is that the assessment of program quality depends on judgments by the authors about the aspects of quality to measure. Guided by our understanding of the literature on the efficacy of problem-behavior-prevention programs, we emphasized measures of dosage and those aspects of interventions that appear to be associated with effectiveness in program research. We also emphasized the extent of coverage on the grounds that interventions reaching large portions of the population are likely to have more aggregate effect. This approach to assessing program quality is a limitation because when there has been little or no research on a type of prevention or intervention activity, there is little basis for assessing program quality. There has been little research on many of the things schools do to prevent or reduce gang involvement and other kinds of problem behavior. Some aspects of the quality measures seem, nevertheless, incontrovertible. When level of use is low - that is when no one is implementing an activity - it can be regarded as of high quality only in fantasy. When number of sessions or lessons is very low - that is when the intervention is minimal - it can be of high quality only in the briefest sense. And when generally accepted professional practices are not followed, all but the truest of believers in the anything-goes approach to educational intervention will at least question the quality of the intervention. Almost certainly we have failed to measure some aspects of quality that are not yet understood due to a lack of research or systematic scrutiny of much of what is done in programs. This limitation of omission is far more likely than the possibility that we have mistaken irrelevant program features for indicators of quality.

A second limitation is that results are based on a sample survey involving the reports of program implementers, principals, teachers, and students. In all surveys, respondents' reports are of imperfect reliability and validity. The method depended upon the principals' identification of prevention and intervention activities in their schools - and the correct classification of those activities. We have adduced evidence in this report that principals' reports sometimes are of limited validity. Nonparticipation in surveys may also bias results in unknown ways. Any youths who have already dropped out of school are outside of the universe for the present sample survey, and these out-of-school youths are likely to be more involved with delinquency in general and with gangs than are youths who remain in school.

A third limitation applies to the statistical models of individual youth gang participation and of school gang problems. These models are based on cross sectional data, make assumptions about causal direction that may not be completely true, and are flawed to the extent that causes of the dependent variables that are correlated with variables in the model may be unexamined. Results involving these statistical models should be regarded as suggestive rather than definitive.

The research incorporated steps to cope with these limitations. Nonresponse adjustments were made in producing estimates (and nonresponse adjustments as well as the complex sample design were taken into account in estimating standard errors). Student self-reports of gang involvement were examined for the potential of invalid reporting to bias estimates of gang participation upwards, and estimates excluding responses that appear to be invalid were made. Including or excluding student respondents with low scores on a Veridicality index has little effect on patterns of association of gang participation with other measures.

Despite these limitations, the results provide new information on three aspects of gang problems: (a) the extent of youth participation in gangs, (b) the relation of individual gang participation to personal characteristics and problem behaviors, and (c) the kinds of schools that tend to have greater problems with gangs. Results also provide the first comprehensive description of the nature and extent of gang prevention and intervention activity in schools, and the extent of exposure of young people to those programs. Results indicate that it is possible to measure some aspects of program quality through questionnaire surveys.

## Some Implications About the Nature of Gang Problems

### Gang Participants' Characteristics and Behaviors

The results converge with those of other surveys of youths, in which investigators have found that there is more female participation in gangs than is often assumed. Results also imply that gang participation is not solely an urban problem. Larger percentages of youths identifying themselves as Black, Hispanic, and Other than of those identifying themselves as White belong to a gang, but the larger number of White youths in the country result in larger absolute numbers of White youth gang members than of youths of other ethnic groups.

Although earlier research based on interviews with gang members implies that some persons join gangs as a defensive tactic, the present results clearly show that gang members are victimized at much higher rates than are other youths. Boys who belong to a gang are twice as likely to have been physically attacked, four times as likely to have been robbed, and more than five times as likely to have been threatened with a knife or a gun. Girl gang members are also twice as likely as other girls to have been physically attacked, are five times as likely to have been a robbery victim, and nine times as likely to have been threatened with a knife or a gun.

Gang members are more fearful than are other youths – more often afraid they will be hurt or bothered at school, less often feeling safe, and more likely to avoid certain locations. Gang members are more likely to have had to fight to protect themselves than are other youths, and they have observed more violence in their environments.

The present results for fear and victimization support the earlier characterization of gang participation by James F. Short, Jr. (quoted by Klein, 1995, p. 80): "Gangs seem to promise more than they can deliver. . . . You join the gang for protection, and yet being in the gang makes you more vulnerable."

The results imply that some expected personal characteristics are associated with the odds of participating in a gang. Just as prior research has found commitment to education, belief in rules, and association with delinquent peers to be predictive of delinquent behavior in general, so also did we find that these characteristics predict gang participation. We also find that fearful students are much more likely to belong to a gang. Fearfulness (versus feelings of safety in school) has incremental validity beyond other demographic and personal characteristics examined, and the size of the effect is large. The odds that a youth who is a standard deviation above average in feelings of safety is about .6 the odds that an average youth will belong to a gang, other things being equal.[5]

The self-report surveys of students also show that gang membership is associated with drug use, and that the lower the base rate for involvement with a drug is in the general population, the more lopsided the ratio of gang participant to nonparticipant percentage of use. The high level of drug use among gang members is cause for serious concern.

The present results converge with results from other self-report surveys in specific locations that have found that gang members engage in much more delinquent behavior than do other youths. For example 43% of gang involved boys versus 5% on other boys have committed robbery in the past year. Gang members make up a disproportionately large fraction of youth who carry concealed weapons, and both boy and girl gang members are remarkably violent and destructive.

Carrying of concealed weapons is associated with use of heroin, crack, and with gang membership for boys. For girls, it is also associated with steroid use (which has a low base rate among both boys and girls, but particularly among girls). Media accounts often suggest that fear motivates students to carry a concealed weapon. The present results imply that fearful students are somewhat more likely to carry a hidden weapon, but the association with gang membership and the use of heroin and crack is much stronger.

### Schools With Gang Problems

Overall, 5% of principals reported that gangs are a problem in their schools and 36% reported a gang problem in the community. Urban principals and principals of secondary schools were more likely to report school gang problems. Principals are also more likely to report gang problems when the school enrolls relatively many Hispanic students. Principals' reports of school gang problems do not show strong convergence with other measures of problem behavior in schools or with the percentage of schools' students who report that they participate in gangs. In the 10% of schools with the highest student gang participation rates, only 18% of principals report that gangs are a problem in the school. Nevertheless, principals' reports of school gang problems are associated with more victimization, less safety, and poorer administrator leadership according to teacher reports.

---

[5] The odds of gang membership = (probability of membership)/(probability of nonmembership).

Schools with high rates of student self-reported gang participation tend to be located in communities characterized by concentrated poverty and disorganization. Private and Catholic schools tend to have low rates of self-reported gang participation. A statistical model of the extent to which schools have high rates of student self-reported gang participation implies that concentrated poverty and disorganization in the community, public school auspices, receiving students with behavior problems from various sources, and student perceptions that the school is unsafe (or fear) influence levels of student gang participation. The association of perceptions that the school is unsafe with gang participation rate is especially strong, and this correlation is scarcely reduced at all by the application of statistical controls. Although interpretation of these results should be tempered by the possibility that some of this association may be reciprocal in the sense that gang activity may lead to fear as well as fear leading to gang participation, the finding suggests that maintaining safe environments may be helpful in reducing gang participation.

## Some Implications for School-Based Gang Programs

Results imply that there is great variability in the quality of school-based gang prevention and intervention programs. Perhaps most importantly, they imply that there is much room for the improvement in the quality of programs in some straightforward ways. This includes increases in the use of practices with respect to program content and methods that are found in programs that have been evaluated and found to be effective. It includes increases in the intensity (duration and frequency) with which programs are operated, and it includes increases in extent of their application.

The large number of programs, activities, or arrangements intended to prevent or reduce gang involvement may be surprising. But with about 50.7 million students in over 101 thousand schools, our estimate implies that there is one gang prevention or intervention program for about every 63 students or about 8 programs per school.. All of these programs have additional objectives in reducing problem behavior more generally – including reducing delinquent behavior and drug use and making schools more orderly. This estimate *excludes* schoolwide discipline policies, rules, and arrangements; it is limited to what we have called "discretionary" programs or activities. The large number is probably not surprising to those who are involved with contemporary schools, which have become a repository for an amazing array of diverse and diffuse programs and activities. Many of these are originated by school personnel who perceive a need or an interest and create a program. Many of these originate from outside the school as community organizations, government agencies, and individuals initiate services in the school. A principal implication of the data on quality is that a large fraction of these programs are *not* programmatic in the sense that they are well developed and high quality systems of service.

Quite the opposite. It appears likely that the quality of prevention activity in schools might improve if it were consolidated into a smaller number of higher quality programs.

Results show that secondary school students who report being involved in gangs are less exposed to many prevention activities than are students who are not involved in gangs. This suggests the potential for including more of the highest risk youths by actively seeking ways to include them. An analysis of the forces that limit the participation of gang-involved youths from participation should be a part of the planning of any gang prevention or intervention program, with program design features or arrangements put in place to cope with or minimize the influence of these forces.

Fewer than half of gang prevention or intervention programs have been guided by a formal needs assessment. Unfortunately, we have no measure of the quality, thoroughness, or focus of this needs assessment, and experience implies than the majority of needs assessments for school based programs are cursory or pro forma. Goldstein and Kodluboy (1998) and Howell (2000) among others have emphasized the importance of a comprehensive assessment of problems, and the development of programs only after such assessment. Evidently, there is much room for the increased practice of needs assessment in program planning.[6] Formal planning is associated with stronger programs in the present research. Other correlates of the quality of school-based prevention programs are described by G. D. Gottfredson et al. (2000).

Formal needs assessment may contribute to (or depend on) principals' willingness to identify problems related to gangs. The finding that principals usually reported that gangs are not a problem even in schools with a high percentage of students reporting that they participate in gangs suggests that lack of principal recognition of problems may be an obstacle to the development of effective prevention and intervention programs. At the very least, the results imply that principals' reports that gang activity is not a problem should be met with skepticism unless evidence from other sources confirms the reports.

In an earlier report (G. D. Gottfredson et al., 2000) we showed that principals' reports of school crime show little convergence with reports by students and teachers of school safety, problem behavior, victimization, or classroom order. When combined with the present observation that principals' accounts of school gang problems are of limited validity, those results suggest the possibility that school leaders are often an obstacle to confronting problems of school safety – including gang problems.

---

[6] Formal problem assessment is an intended component of the Office of Juvenile Justice and Delinquency Prevention's Comprehensive Gang Prevention, Intervention, and Suppression Model (Burch & Chemers, 1997; Howell, 2000; Spergel, 1993, Chap. 7; Spergel & Alexander, 1991). Guidance for performing an assessment has been developed (National Youth Gang Center, 2001a) along with guidance for program planning (National Youth Gang Center, 2001b).

The results extend those of earlier research on gangs in schools (Howell & Lynch, 2000) by including measures of individual gang participation and by allowing an examination of rates of gang participation in specific sampled schools. Individual gang participation - and rates of gang participation in schools - is strongly associated with fear (or perceptions that the school environment is not safe), drug involvement, and other forms of problem behavior. The analyses conducted do not allow a determination about the extent to which fear or unsafe school environments contribute to gang involvement versus the extent to which gang involvement produces fear or unsafe environments. The strong inverse link between perceptions of school safety and levels of gang involvement suggests that efforts to promote a safe environment and make all students feel safe may reduce the risk of youth gang involvement.

## Implications for Gang Prevention and Intervention in General

The prominence of fear among the correlates of individual gang membership and of school gang concentration also suggests an approach to gang prevention or intervention that has not been much emphasized. Perhaps if we could make gang members or prospective gang members feel safer, gang cohesion would decline and individual gang participation become less likely. Thinking about an approach to confronting gang problems that involves protecting rather than cracking down upon gang members may be anathema for law enforcement and school personnel. In view of the evident fact that gang members are likely to engage in a great deal of delinquent behavior, use drugs, and carry concealed weapons, it may be difficult to think of them as individuals in need of protection rather than prosecution or expulsion. But the evidence seems consistent with the hypothesis that if people and places could be made safer, gang problems would be ameliorated.

Youth gang members are evidently often quite engrossed in particular subcultures and estranged from other perspectives (see Klein, 1995). And at present, communities where gang problems are concentrated are often communities where citizens have least regard for and confidence in the police and other institutions. Further, the specific individuals involved with gangs are likely to be those least disposed to expect protection from the police or school administrators. Accordingly, protective interventions that lead to substantial reductions in fear among gang members and gang prone youths may be difficult to put in place. Nevertheless the apparent periodic and at least temporary success of "truces" and similar efforts to de-escalate gang conflict also suggests the potential of interventions based on a fear versus safety theory of gang prevention and intervention.

# References

A school with 2 R's: Rules and results. (1998, February 9). *Minneapolis Star Tribune.* [Web document obtained from archives at http://www.startribune.com]

Alexander, J. F., & Parsons, B. V. (1973). Short term behavioral intervention with delinquent families: Impact on family process and recidivism. *Journal of Abnormal Psyc;hology, 81*, 219-225.

Alexander, J., Pugh, C., & Parsons, B. (1998). *Blueprints for violence prevention: Functional family therapy.* Boulder, CO: Center for the Study of Prevention and Violence, University of Colorado.

Atkeson, B. M., & Forehand, R. (1979). Home-based reinforcement programs designed to modify classroom behavior: A review and methodological evaluation. *Psychological Bulletin, 86*, 1298-1308.

Bachman, J. G., O'Malley, P. M., & Johnston, J. (1978). *Youth in transition, Vol, VI: Adolescence to adulthood – change and stability in the lives of young men.* Ann Arbor, MI: Institute for Social Research, University of Michigan.

Baron, J., & Brown, R. V. (1991). *Teaching decision making to adolescents.* Hillsdale, NJ: Erlbaum.

Barth, R. (1979). Home-based reinforcement of school behavior: A review and analysis. *Review of Educational Research, 49*, 436-458.

Battin, S. R., Hill, K. G., Abbott, R. D., Catalano, R. F., & Hawkins, J. D. (1998). The contribution of gang membership to delinquency beyond delinquent friends. *Criminology, 36*, 93-115.

Battin-Pearson, S. R., Thornberry, T. P., Hawkins, J. D., & Krohn, M. D. (1998). *Gang membership, delinquent peers, and delinquent behavior* (Juvenile Justice Bulletin). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Bennett, S. A. (1978). *Something more than survival: A student-initiated process for school climate improvement.* Walnut Creek, CA: Center for Human Development.

Bokos, P. J., Mejta, C. L., Mickenberg, J. H., & Monks, R. L. (1992). Case management: An alternative approach tro working withintravenous drug users. In R. S. Ashery (Ed.), *Progress and issues in case management* (pp. 92-111) (NIDA Research Monograph 127). Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse.

Bostic, J. Q., & Rauch, P. K. (1999). The 3 R's of school consultation. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*, 339-341.

Botvin, G. (1989). *Life skills training: Teacher's manual.* Cornell University Medical College.

Botvin, G. J., Baker, E., Dusenbury, L, Botvin, E. M., & Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle class population. *Journal of the American Medical Association, 273*, 1106-1112.

Botvin, G. J., Baker, E., Dusenbury, L., Tortu, S., & Botvin, E. M. (1990). Preventing adolescent drug abuse throuygh a multi-model cognitive-behavioral approach: Results of a 3-year study. *Journal of Consulting and Clinical Psychology, 58*, 437-446.

Boys and Girls Clubs. (1993). *Gang prevention through targeted outreach.* Atlanta, GA: Author.

Brophy, J. (1983). Classroom organization and management. *Elementary School Journal, 83*, 265-286.

Bry, B. H. (1982). Reducing the incidence of adolescent problems through preventive intervention: One- and five-year follow-up. *American Journal of Community Psychology, 10*, 265-276.

Burch, J. H., II, & Chemers, B. M. (1997). *A comprehensive response to America's youth gang problem* (Fact Sheet #40). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Bureau of Justice Assistance. (1995). *Boys & Girls Clubs of America* (Fact Sheet). Washington, DC: Author.

California Department of Education. (1998). *Getting results, Part I, California action guide to creating safe and drug-free schools and communities.* Sacramento, CA, Author.

Camp, B. W., & Bash, M. S. (1985). *Think aloud: Increasing social and cognitive skills -- A problem solving program for children.* Champaign, IL: Research Press.

Campbell, A. (1990). Female participation in gangs. In C. R. Huff (Ed.), *Gangs in America.* Newbury Park, CA: Sage.

Caplan, M., Weissberg, R. P., Grober, J. H., Sivo, P. J., Grady, K., & Jacoby, C. (1992). Social competence promotion with inner-city and suburban young adolescents: Effects on social adjustment and alcohol use. *Journal of Consulting and Clinical Psychology, 60*. 56-63.

Chandler, K. A., Chapman, C. D., Rand, M. R., & Taylor, B. M. (1998). *Students' reports of school crime: 1989 and 1995* (NCES 98-241, NCJ 169607). Washington, DC: U.S. Department of Education, National Center for Education Statistics and U.S. Department of Justice, Office of Justice Programs.

Chesney-Lind, M., Mayeda, D., Marker, N., Okamoto, S., Koo, J., Pasko, L., Woo, K., & Balayan, E. (2001). *Dimensions of youth gang membership and juvenile delinquency in Hawai'i: Volume I.* Honolulu, HI: Center for4 Youth Research, University of Hawai'i at Mānoa.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37-46.

Conway, J. M., & Huffcutt, A. I. (1997). Psychometric properties of multisource performance ratings: A meta-analysis of subordinate, supervisor, peer, and self-ratings. *Human Performance, 10*, 331-360.

Cook, T. D., Habib, F.-N., Phillips, M., Settersten, R. A., Shagle, S. C., & Degirmencioglu, S. M. (1999). Comer's school development program in Prince George's County, Maryland: A theory-based evaluation. *American Educational Research Journal, 36*, 543-597.

Cook, T. D., Murphy, R. F., & Hunt, H. D. (2000). Comer's school development program in Chicago: A theory-based evaluation. *American Educational Research Journal, 37*, 535-597.

Cornell, D. G., & Loper, A. B. (1998). Assessment of violence and other high-risk behaviors with a school survey. *School Psychology Review, 27*, 317-330.

Curry, G., D., Ball, R. A., & Decker, S. H. (1996). Estimating the national scope of gang crime from law enforcement data. In C. R. Huff (Ed.), *Gangs in America* (2nd ed., pp. 21 - 36). Thousand Oaks, CA: Sage.

Curry, G. D., Ball, R. A., & Fox, R. J. (1994). Gang crime and law enforcement recordkeeping. *Research in brief.* Washington, DC: U.S. Department of Justice, National Institute of Justice.

Decker, S. H. (1996). Collective and normative features of gang violence. *Justice Quarterly, 13*, 243-264.

Decker, S. H., & van Winkle, B. (1994). Slinging dope: The role of gangs and gang members in drug sales. *Justice Quarterly, 11*, 583-604.

Dishion, T., & Andrews, D. W. (1995). Preventing escalation in problem behaviors with high-risk young adolescents: Immediate and 1-year outcomes. *Journal of Consulting and Clinical Psychology, 63*, 538.

Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American Psychologist, 54*, 755-764.

Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (ed.), *Handbook of research on teaching* (3rd ed.). NY: MacMillan.

Efron, B. & Gong, G. (1983). A leisurely look at the bootstrap, the jackknife, and cross-validation. *The American Statistician, 37*, 36-48.

Egley, A. (2000). *Highlights of the 1999 National Youth Gang Survey* (Fact Sheet). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Egley, A. (2001). *National youth gang survey trends from 1996 to 2000* (Fact Sheet). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Elias, M. J., & Clabby, J. F. (1989). *Social decision-making skills: A curriculum guide for the elementary grades.* Rockville, MD: Aspen.

Elias, M. J., & Clabby, J. F. (1992). *Building social problem solving skills: Guidelines from a school-based program.* San Francisco: Jossey-Bass.

Elias, M. J., Weissberg, R. P., Hawkins, J. D., Perry, C. A., Zins, J. E., Dodge, K. C., Kendall, P. C., Gottfredson, D. C., Rotheram-Borus, M., Jason, L. A., & Wilson-Brewer, R. (1994). The school-based promotion of social competence: Theory, practice and policy. In R. J. Haggerty, N. Garmezy, M. Rutter, & L. Sherrod (eds.), *Risk and resilience in children: Developmental approaches.* Cambridge: University of Cambridge Press.

Embry, D. D., Flannery, D. J., Vazsonyi, A. T., Powell, K. E., & Atha, H. (1996). PeaceBuilders: A theoretically drive, school-based model for early violence prevention. *American Journal of Preventive Medicine, 12*, 91-100.

Emmer, E. T., & Aussiker, A. (1989). School and classroom discipline programs: How well do they work? In O. C. Moles (ed.), *Strategies to reduce student misbehavior.* Washington, DC: U.S. Department of Education.

Employment and Training Administration. (1991). *Dictionary of occupational titles* (4th revised ed.). Washington, DC: U.S. Government Printing Office.

Esbensen, F.-A. (1991). Gangs, drugs, and delinquency in a survey of urban youth. *Criminology, 31*, 565-587.

Esbensen, F.-A., & Huizinga, D. (1993). Gangs, drugs, and delinquency in a survey of urban youth. *Criminology, 31*, 565-587.

Esbensen, F.-A., & Osgood, D. W. (1999). Gang Resistance Education and Training (GREAT): Results from the national evaluation. *Journal of Research in Crime and Delinquency, 36*, 194-225.

Esbensen, F.-A., Osgood, D. W., Taylor, T. J., Peterson, D., & Freng, A. (In press.) How great is G.R.E.A.T.?: Results from a longitudinal quasi-experimental design. *Criminology and Public Policy.*

Esbensen, F.-A., Thronberry, T. P., & Huizinga, D. (1993). Gangs. In D. Huizinga, R. Loeber, & T. P. Thronberry (eds.), *Urban delinquency and substance abuse* (Technical Report), pp. 14-1 - 14-26. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Esbenson, F.-A., & Winfree, L. T. (1998). Race and gender differences between gang and nongang youths: Results from a multisite survey. *Justice Quarterly, 15*, 505-525.

Evertson, C. & Harris, A. (1992). What we know about managing classrooms. *Educational Leadership, 49* (7), 74-78.

Fagan, J. (1990a). Social processes of delinquency and dug use among urban gangs. In C. R. Huff (Ed.), *Gangs in America* (pp. 266-275). Newbury Park, CA: Sage.

Fagan, J. (1990b). The social organization of drug use and drug dealing among urban gangs. *Criminology, 27*, 633-669.

Fagan, J. (1996). Gangs, drugs, and neighborhood change. In C. R. Huff (Ed.), *Gangs in America* (2$^{nd}$ ed, pp. 39-74). Thousand Oaks, CA: Sage.

Farmer, T. W. (2000). The social dynamics of aggressive and disruptive behavior in school: Implications for behavior consultation. *Journal of Educational and Psychological Consultation, 11*, 299-321.

Farrington, D. P. (1998). Predictors, causes, and correlates of male youth violence. In M. Tonry & M. H. Moore (Eds.), *Youth violence* (Crime and Justice: A Review of Research, Vol. 24). Chicago, IL: University of Chicago Press.

Feyerherm, W., Pope, C., & Lovell, R. (1992). *Youth gang prevention and early intervention programs* (Final Research Report). Portland, OR: Portland State University, Regional Research Institute for Human Services.

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*, 26-42.

Goldstein, A. P. (1993). Interpersonal skills training interventions. In A. P. Goldstein & C. R. Huff (eds)., *The gang intervention handbook* (pp. 87-157). Champaign, IL: Research Press.

Goldstein, A. P., & Kodluboy, D. W. (1998). *Gangs in schools.* Champaign, IL: Research Press.

Gottfredson, D. C. (1986). An empirical test of school-based environmental and individual interventions to reduce the risk of delinquent behavior. *Criminology, 24*, 705-731.

Gottfredson, D. C. (1988). An evaluation of an organization development approach to reducing school disorder. *Evaluation Review, 11*, 739-763.

Gottfredson, D. C. (1992). Discipline. In M. C. Alkin (ed.), *The prevention of antisocial behavior in children.* NY: Guilford Press.

Gottfredson, D. C. (2001). *Schools and delinquency.* Cambridge, UK: Cambridge University Press.

Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multi-year, multi-school study. *American Educational Research Journal, 30*, 179-215.

Gottfredson, D. C., Gottfredson, G. D., & Skroban, S. (1996). A multi-model school-based prevention demonstration. *Journal of Adolescent Research, 11*, 97-115.

Gottfredson, D. C., Gottfredson, G. D., & Skroban, S. (1998). Can prevention work where it is needed most? *Evaluation Review, 22*, 315-340.

Gottfredson, D. C., Karweit, N. L., & Gottfredson, G. D. (1989). *Reducing disorderly behavior in middle schools* (Report No. 37). Baltimore: Johns Hopkins University, Center for Research on Elementary and Middle Schools.

Gottfredson, G. D. (1981). Schooling and delinquency. In S. E. Martin, L. B. Sechrest, & R. Redner (Eds.), *New directions in the rehabilitation of criminal offenders* (pp. 424-469). Washington, DC: National Academy Press.

Gottfredson, G. D. (1984). A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. *American Psychologist, 39,* 1101-1112.

Gottfredson, G. D. (1987). Peer group interventions to reduce the risk of delinquent behavior: A selective review and a new evaluation. *Criminology, 25,* 1001-1043.

Gottfredson, G. D. (1999a). *The Effective School Battery user's manual* (revised edition). Ellicott City, MD: Gottfredson Associates.

Gottfredson, G. D. (1999b). Survey of school-based gang prevention and intervention programs: Preliminary findings. Paper prepared for the second National Youth Gang Symposium, Las Vegas, Nevada, 29 July, 1999.

Gottfredson, G. D. (2000, August). Organizational focus in a large national sample of schools. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Gottfredson, G. D., & Gottfredson, D. C. (1987). *Using organization development to improve school climate* (Report No. 17). Baltimore, MD: Johns Hopkins University, Center for Research on Elementary and Middle Schools. ED 295 283

Gottfredson, G. D., & Gottfredson, D. C. (1997). *School-based prevention programs defined and taxonomies of school-based prevention activities and objectives used in the National Study of Delinquency Prevention in Schools.* Ellicott City, MD: Gottfredson Associates, Inc.

Gottfredson, G. D., & Gottfredson, D. C. (1999). *Development and applications of theoretical measures for evaluating drug and delinquency prevention programs: Technical manual for research editions of What About You? (WAY).* Ellicott City, MD: Gottfredson Associates.

Gottfredson, G. D., & Gottfredson, D. C. (In press.). What schools do to prevent problem behavior and promote safe environments. *Journal of Educational and Psychological Consultation.*

Gottfredson, G. D., Gottfredson, D. C., Czeh, E. R., Cantor, D., Crosse, S., & Hantman, I. (2000). *National study of delinquency prevention in schools.* Ellicott City, MD: Gottfredson Associates. (available on line at http://www.gottfredson.com)

Gottfredson, G. D., & Holland, J. L. (1997). EIS Organizational Focus Questionnaire. In J. L. Holland, *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.), pp. 273-275. Odessa, FL: Psychological Assessment Resources.

Gottfredson, G. D., Jones, E. M., & Gore, T. W. (In press.). Implementation and evaluation of a cognitive-behavioral intervention to prevent problem behavior in a disorganized school. *Prevention Science.*

Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime.* Berkeley, CA: University of California Press.

Grossman, J. B., & Tierney, J. P. (1998). Does mentoring work? An impact study of the Big Brothers Big Sisters program. *Evaluation Review, 22,* 403-426.

Hagedorn, J. M. (1988). *People and folks: Gangs, crime and the underclass in a rustbelt city.* Chicago, IL: Lakeview.

Hagedorn, J. M. (1998). Gang violence in the postindustrial era. In M. Tonry & M. H. Moore (Eds.), *Youth violence* (Crime and Justice: A Review of Research, Vol. 24, pp. 365-419). Chicago, IL: University of Chicago Press.

Hall, G. E., & Loucks, S. F. (1977). A development model for determining whether the treatment is actually implemented. *American Educational Research Journal, 14*, 263-276.

Hamburg, B. (1990). *Life skills training: Preventive interventions for young adolescents.* NY: Carnegie Council on Adolescent Development.

Hawkins, J. D., Herrenkohl, T., Farrington, D. Pl, Brewer, D., Catalano, R. F., & Harachi, T. "W. (1998). A review of predictors of youth violence. In R. Loeber & D. P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage.

Hill, K. G., Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R., & Edwards, T. (1996, November). *The longitudinal dynamics of gang membership and problem behavior: A replication and extension of the Denver and Rochester gang studies in Seattle.* Paper presented at the annual meeting of the American Society of Criminology, Chicago.

Hindelang, M. J., Hirschi, T., & Weis, J. G. (1981). *Measuring delinquency.* Beverly Hills, CA: Sage.

Hollin, C. R. (1993). Cognitive-behavioral interventions. In A. P. Goldstein & C. R. Huff (eds)., *The gang intervention handbook* (pp. 55-85). Champaign, IL: Research Press.

Howell, J. C. (1997, July). Oral presentation in the panel on the Study Report on Serious Chronic and Violent Offenders, Annual Conference on Criminal Justice Research and Evaluation, Washington, DC.

Howell, J. C. (2000). *Youth gang programs and strategies: Summary.* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Howell, J. C., & Decker, S. H. (1999). *The youth gangs, drugs, and violence connection* (Juvenile Justice Bulletin). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Howell, J. C., & Lynch, J. P. (2000). *Youth gangs in schools* (Juvenile Justice Bulletin). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Huff, C. R. (1998). *Comparing the criminal behavior of youth gangs and at-risk youths* (Research in Brief). Washington, DC: U.S. Department of Justice, National Institute of Justice.

Huizinga, D. (1991). Assessing violent behavior with self-reports. In J. S. Milner (Ed.), *Neuropsychology of aggression* (pp. 47-66). Boston, MA: Kluwer.

Johnson, D., & Johnson, R. (1989). *Cooperation and competition: Theory and research.* Edna, MN: Interaction.

Kazdin, A. E. (1987). Treatment of antisocial behavior in children: Current status and future directions. *Psychological Bulletin, 102*, 187-203.

Kish, L. (1995). *Survey sampling* (Wiley Classics Library Ed.). New York, NY: Wiley. (Originally published 1965.)

Klein, M. W. (1971). *Street gangs and street workers.* Englewood Cliffs, NJ: Prentice-Hall.

Klein, M. W. (1995). *The American street gang: Its nature, prevalence, and control.* New York: Oxford University Press.

Laing, J., Sawyer, R., & Noble, J. (1987). *Accuracy of self-reported activities and accomplishments of college-bound students* (Research Report No. 87-6). Iowa City, IA: American College Testing Program.

Lewis, B. A. (1998). *The kid's guide to social action: How to solve the social problems* you choose–*and turn creative thinking into positive action.* Minneapolis, MN: Free Spirit Publishing.

Lipsey, M. W., & Derzon, H. H. (1998). Predictors of violent or serious delinquency in adolescence and early adulthood: A synthesis of longitudinal research. In R. Loeber & D. P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 86-105). Thousand Oaks, CA: Sage.

Loeber, R., & Farrington, D. P. (Eds.). (1998). *Serious and violent juvenile offenders: Risk factors and successful interventions.* Thousand Oaks, CA: Sage.

Loftin, C. (1986). Assaultive violence as a contagious social process. *Bulletin of the New York Academy of Medicine, 62*, 550-555.

Lovell, R., & Pope, C. E. (1993). Recreational interventions. In A. P. Goldstein & C. R. Huff (eds)., *The gang intervention handbook* (pp. 319-332). Champaign, IL: Research Press.

Mac Iver, D. (1993). Effects of improvement-focused student recognition on young adolescents' performance and motivation in the classroom. *Advances in Motivation and Achievement, 8*, 191-216.

Mare, R. D., & Mason, W. M. (1980). Children's reports of parental socioeconomic status. *Sociological Methods and Research, 9*, 178-198.

Mayeda, D., & Okamoto, S. (1999). Positive Alternative Gang Education. In M. Chesney-Lind, D. Mayeda, S. Okamoto, V. Paramore, & N. Marker (Eds.), *Delinquency and gangs in Hawai'i. Volume II: Response* (Report to the 21st Hawai'i State Legislature). Honolulu, HI: Center for Youth Research, University of Hawai'i at Manoa.

Mayer, G. R., & Butterworth, T. W. (1979). A preventive approach to school violence and vandalism: An experimental study. *Personnel and Guidance Journal, 57*, 436-441.

Mayer, G. R., Butterworth, T. W., Nafpaktitis, M., & Sulzer-Azaroff, B. (1983). Preventing school vandalism and improving discipline: A three-year study. *Journal of Applied Behavior Analysis, 16*, 355-369.

Miller, W. B. (1992). *Crime by youth gangs and groups in the United States* (Revised ed.). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Miller, W. B. (2001). *The growth of youth gang problems in the United States: 1970-98.* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Moore, J. P. (1997). *Highlights of the 1995 National Youth Gang Survey* (Fact Sheet No. 63). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Moore, J. W. (1978). *Homeboys: Gangs, drugs, and prison in the barrios of Los Angeles.* Philadelphia, PA: Temple University Press.

Moore, J. W. (1998). Understanding youth street gangs: Economic restructuring and the urban underclass. In M. W. Watts, (ed.), *Cross cultural perspectives on youth, radicalism, and violence* (pp. 65 - 78). NY: JAI.

National Youth Gang Center. (1997-1999). *National Youth Gang Survey: Summary.* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

National Youth Gang Center. (2001a). *Assessing your community's gang problem.* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

National Youth Gang Center. (2001b). *Planning for implementation of the OJJDP comprehensive gang model.* Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Office of Juvenile Justice and Delinquency Prevention. (1991). OJJDP and Boys and Girls Clubs of America: Public housing and high-risk youth. *Juvenile Justice Bulletin*, July, pp. 1-4.

Olen, D. R. (1992). *Peer mediator training program: Trainer's manual.* Wauwatosa, WI: Life Skills Press.

Padilla, F. (1992). *The gang as an American enterprise.* New Brunswick, NJ: Rutgers University Press.

Reid, J. B., & Patterson, G. R. (1991). Early prevention and intervention with conduct problems: A social interactional model for the integration of research and practice. In G. Stoner, M. R. Shinn, & H. M. Walker (Eds.), *Interventions for achievement and behavior problems.* Washington, DC: National Association of School Psychologists.

Ridgely, M. S., & Willenbring, M. L. (1992). Applications of case management to drug abuse treatment: Overview of models and research issues. In R. S. Ashery (Ed.), *Progress and* *issues in case management* (pp. 12-33) (NIDA Research Monograph 127). Rockville, MD: U.S. Department of Health and Human Services, National Institute on Drug Abuse.

Rosenblatt, J. A., & Furlong, M. J. (1996). Assessing the reliability and validity of student self-reports of campus violence. *Journal of Youth and Adolescence, 26*, 187-202.

Schrumpf, F., Crawford, D. K., Bodine, R. J. (1997). *Peer Mediation: Conflict Resolution in Schools. Program Guide*. Champaign, IL: Research Press.

Sellers, C. S., Taylor, T. J., & Esbensen, F.-A. (1998). Reality check: Evaluating a school-based gang prevention model. *Evaluation Review, 22*, 590-608.

Shure, M. B. & Spivak, G. (1979). Interpersonal cognitive problem solving and primary prevention: Programming for preschool and kindergarten children. *Journal of Clinical Child Psychology, 8*, 89-94.

Shure, M. B. & Spivak, G. (1982). Interpersonal problem-solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology, 10*, 341-356.

Simonsen, April A. (1998). *The effects of community disorganization on school administrative practices: Implications for delinquency prevention practice.* Unpublished masters thesis, University of Maryland, College Park.

Skroban, S. B., Gottfredson, D. C., & Gottfredson, G.D. (1999). A school-based social competency promotion demonstration. *Evaluation Review, 23*, 3-27.

Slavin, R. E., Madden, N., & Stevens, R. (1990). Cooperative learning models for the 3 R's. *Educational Leadership, 47*, 67-77.

Spergel, I. A. (1966). *Street gang work: Theory and practice*. Reading, MA: Addison-Wesley.

Spergel, I. (1990). *National youth gang suppression and intervention program* (Juvenile Justice Bulletin). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Spergel, I. (1993). *Gang suppression and intervention: An assessment*. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.

Spergel, I., & Alexander, A. (1991). *School technical assistance manual*. Rockville, MD: Juvenile Justice Clearinghouse.

Spergel, I. A., & Chance, R. L. (1991). National Youth Gang Suppression and Intervention Program. *NIJ Reports*, No. 224, 21-24.

Spivak, G., Platt, J. J., & Shure, M. B. (1976). *The problem-solving approach to adjustment*. San Francisco: Jossey-Bass.

Stephens, R. D. (1993). School-based interventions: Safety and security. In A. P. Goldstein & C. R. Huff (eds)., *The gang intervention handbook* (pp. 219-256). Champaign, IL: Research Press.

Stephens, R. D. (1994). Planning for better and safer schools: School violence prevention and intervention strategies. *School Psychology Review, 23*, 204-215.

Sundlee, C. A., & Stapp, W. (1979). *Youth action teams: A primer for youth participation* (The action team manual). San Rafael, CA: Social Action Research Center.

Thompson, D. W., & Jason, L. A. (1988). Street gangs and preventive interventions. *Criminal Justice and Behavior, 15*, 323-333.

Thornberry, T. P. (1998). Membership in youth gangs and involvement in serious and violent offending. In R. Loeber & D. P. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 147-166). Thousand Oaks, CA: Sage.

Thornberry, T. P., & Burch, J. H., II. (1997). *Gang members and delinquent behavior* (Juvenile Justice Bulletin). Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinqency Prevention.

Thornberry, T. P., Krohn, M. D., Lizotte, A. J., & Chard-Wierschem, D. (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime and Delinquency, 30*, 55-87.

Thrasher, F. M. (1927). *A study of one thousand three hundred thirteen gangs in Chicago.* Chicago, IL: University of Chicago Press.

Vigil, D. (1988). *Barrio gangs.* Austin, TX: University of Texas Press.

Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices.* Pacific Grove, CA: Brooks/Cole.

Wasik, B. A., & Slavin, R. E. (1994). Preventing early reading failure with one-to-one tutoring: A review of five programs. In R. E. Slavin, N. L. Karweit, & B. A. Wasik (Eds.), *Preventing early school failure* (pp. 143-174). Boston, MA: Allyn & Bacon.

Weissberg, R. P., Caplan, M., Bennetto, L., & Jackson, A. S. (1990). *Sixth-Grade Social Problem-Solving Module*. Chicago: University of Illinois at Chicago, Department of Psychology.

Weissberg, R. P., & Elias, M. J. (1993). Enhancing young people's social competence and health behavior: An important challenge for educators, scientists, policymakers, and funders. *Applied and Preventive Psychology, 2*, 179-190.

Weissberg, R. P., Gullotta, T. P., Hampton, R. L., Ryan, B. A., & Adams, G. R. (eds.). (1997). *Healthy children 2010: Establishing preventive services.* Thousand Oaks, CA: Sage.

Wilkins, L. T. (1965). *Social deviance: Social policy, action, and research.* Englewood Cliffs, NJ: Prentice-Hall.

Womer, S. C. (1997, November). *What kinds of school-based prevention programs are publicized*? Paper presented at the annual meeting of the American Society of Criminology, San Diego.

Appendix Table 1: *Items Included in Best Practices Scale: Content*

---

*Prevention Curriculum, Instruction or Training*
Which of the following topics is covered by this instruction or training?

> Social influence; Social problem solving skills; Self-management; Attribution; Communication skills; Emotional control; Emotional perspective taking

Please indicate the ***main*** instructional strategies used in this program.

> Behavioral modeling; Role-playing; Rehearsal and practice of new skill; Use of cues to remind individual to display a behavior

*Behavioral Programming or Behavior Modification*
Which of the following describe this activity?

> Individual behavioral or behavior modification programs (e.g., programs in which the behavior of an individual is monitored and reinforced); Token economy systems in which individuals earn tokens for meeting specified goals; Individual education plans in which rewards or punishments in school are contingent on meeting individual *educational* goals; Individual behavioral plans in which rewards or punishments in school are contingent on meeting individual *behavioral* goals; Home-based backup reinforcement for individual behavior in school; Group or classroom behavior modification programs in which the behavior of a group is monitored and reinforced; Token economy systems in which all members of a group or classroom participate in a system of earning tokens, points, or scrip for the behavior of the group as a whole

*Classroom Organization and Management Practices*
Which of the following classroom management methods are the main elements of this program?

> Management of time; Changing physical arrangement of the classroom for greater efficiency, better surveillance, or to make materials more easily accessible; Establishing procedures for student transitions and mobility; Establishing procedures for routine classroom instruction and student work; Establishing classroom rules and consequences for rule violation; Changing procedures for student evaluation, feedback, or accountability; Use of rewards and punishments; Changes in the groupings of students by ability, achievement, or effort *within the classroom*

*Improvements to Instructional Practices or Methods*
Which of the following instructional strategies are the main elements of this program?

> Formal cooperative learning; Mastery learning; Individualized instruction; Computerized instruction; Behavioral modeling; Role-playing; Rehearsal and practice of new skill; Use of cues to remind individual to display a behavior

Appendix Table 2: *Items Included in Best Practices Scale: Methods*

---

*Prevention Curriculum, Instruction or Training and Improvements to Instructional Practices or Methods*

Does the instructor assess student mastery and re-teach material that has not been mastered? (Yes)

Which of the following describe the application of rewards for student learning when this method is used?

***Groups*** are rewarded for ***group accomplishments*** (Yes); ***Individuals*** are rewarded for their ***own achievement*** (Yes); ***No special rewards*** are applied for student achievement (No)

Please describe the distribution of recognition, rewards, evaluation criteria, or grades for students when this instructional method is used.

Rewards, recognition, or evaluation criteria are not a part of this program (No); Students are frequently recognized for the effort they expend (Yes); Students are frequently recognized for their improvement over prior levels (Yes); Students are frequently recognized for successful competition against students with similar levels of past performance (Yes); Teachers usually avoid calling attention to the level of individual student performance (No); Does this instructional method involve any of the following strategies for increasing the amount of time in instruction? (Any affirmative response)

*Behavioral Programming or Behavior Modification*

Are there different specific behavioral or educational goals for different individuals or groups? (Yes, specific goals are set for each individual or group); How often do the behavioral or educational plans involved in this program include a method of monitoring or tracking the behavior over time? (Always); How often is behavior monitored or tracked for a period of time before attempting to change it? (Always); How often are specific behavioral goals a written part of each behavioral plan? (Always); How often are the specific rewards or punishments to be applied in response to specific behaviors made a written part of each behavioral plan? (Always); How often is behavior tracked and responded to by a behavior modifier in this program? (Daily or more often than daily); What most often occurs when student behavior does not change when a behavior modification program is applied? (Different reinforcers or a different schedule are sought); What usually occurs when the desired changes in student behavior ***do*** occur when a behavior modification program is applied? (The program is adjusted so that a reward is given less frequently or is more difficult for the individual to earn)

---

*continued . . .*

Appendix Table 2: *Items Included in Best Practices Scale: Methods (continued)*

| |
|---|
| *Counseling, Social Work, Psychological or Therapeutic Activity* |
| Are formal assessments made to understand or diagnose the individual person or his or her situation? (Sometimes, usually, or always); Is a written diagnosis or problem statement prepared for each participant? (Always); Are written treatment goals developed for each participating student? (Always); Does the student agree to treatment plan contract? (Usually or always); Is a contract to implement a treatment plan agreed to by the client? (Always); Are there different specific treatment goals for different individual students? (Yes, individual goals depend on individual needs as indicated by assessment); If referrals are made, are follow-up activities conducted by school-based personnel who made the referral? (The service provider is contacted to verify that service was provided, or The service provider is contacted periodically to monitor the client's progress); How often do the counseling or social work plans involved in this program include a method of monitoring or tracking student behavior over time? (Always) |
| *Mentoring or Coaching* |
| Is formal attempt made to match the individual tutor or mentor with the individual youth based on interests or personality? (Yes); Does this program involve the application of rewards or reinforcers based on student performance or behavior? (Always); Is a written contract between the student and the mentor or tutor (or between the student and the program) signed by the student? (Always); How often do the tutoring or mentoring plans involved in this program include a method of monitoring or tracking student behavior over time? (Always); What do the tutors, mentors, or coaches usually do with the students? Do they help them with social or interpersonal situations or skills (such as manners, self-control, or grooming)? (Yes); What do the tutors, mentors, or coaches usually do with the students? Do they engage in recreation (such as attend sporting events or movies) or eating (such as visits to restaurants)? (Yes); What do the tutors, mentors, or coaches usually do with the students? Do they help with family situations or problems? (Yes); What do the tutors, mentors, or coaches usually do with the students? Do they help them prepare for employment? (Yes) |

*continued . . .*

Appendix Table 2: *Items Included in Best Practices Scale: Methods (continued)*

---

*Tutoring (Not Elsewhere Classified)*

Is formal assessment activity conducted to understand the individual youth or his or her situation? (Always); Are written learning, social, or behavioral objectives developed for each participating student? (Always); Does this program involve the application of rewards or reinforcers based on student performance or behavior? (Always); Do tutors, mentors, or coaches ***actually receive*** materials or information from teachers or other school personnel to be used with students? (Always); How often do the tutoring or mentoring plans involved in this program include a method of monitoring or tracking student behavior over time? (Always); Does the ***intended*** way of operating the tutoring or mentoring activity require that the tutors, mentors, or coaches receive materials or information from teachers or other school personnel to be used with students? (Yes); What do the tutors, mentors, or coaches usually do with the students? (Help them with academic tasks); Are there different specific objectives or activities for different individual students? (Yes, individual objectives depend on individual needs as indicated by assessment); Who decides on the specific activities in which students will be involved together with the tutor or mentor? (Usually or almost always decided by the adult)

*Classroom Organization and Management Practices*

Does your classroom management program focus on establishing procedures for any of the following routine classroom activities?

Beginning the class period; Leaving the room; Use of materials or equipment; What students must bring to class; Ending the class period

Does your classroom management program focus on any of the following procedures for student ***seat work and teacher directed instruction***?

Expectations for student behavior during presentations; Expectations for the nature and amount of student participation; Procedures for student seat work

Does your classroom management program focus on any of the following procedures for ***student group work?***

Procedures for the use of materials and supplies by groups; The assignment of students to groups; Assignment of roles within groups; Setting goals for groups; Expectations for level of students' participation in their groups

Does your classroom management program require establishment of classroom rules?

Does this classroom management procedure require the teaching of the classroom rules during the first week of class?

---

*continued . . .*

Appendix Table 2: *Items Included in Best Practices Scale: Methods (continued)*

Does this classroom management procedure involve procedures for student evaluation, feedback, and accountability?

> It clarifies (or requires teachers to clarify) criteria for evaluating student performance; It provides a specific structure or schedule for the monitoring of student progress; It requires teachers to give students feedback on their performance with a specified frequency or schedule; It provides specific procedures for the communication of student assignments

Does the program involve training or technical assistance to help teachers employ any of the following classroom or instructional procedures, skills, or activities to prevent student behavior?

> Vigilance for potential student misconduct before it occurs and signaling this awareness to students; Prompt identification and correction of student misbehavior; Keeping instruction moving rather than allowing infractions, diversions, or student management activity to interfere with instruction; Engaging all students in the class even when only one student is performing; Making efficient transitions among activities in the classroom; Giving clear instructions to students

Which of the following describes the application of rewards for student conduct when this method is used?

> ***Groups*** are rewarded for ***group conduct***; ***Individuals*** are rewarded for their ***own behavior***; ***No special rewards*** are applied for student conduct ( No)

Please describe how recognition, rewards, or punishments are used in this classroom management method.

> Rewards, recognition, or punishments are not a part of this program ( No); Students are frequently recognized for their behavior so that students with superior conduct receive rewards and students who misbehave receive few rewards; Students are frequently recognized for the effort they expend; Students are frequently recognized for improving their conduct over prior levels; Students are frequently recognized for improving their behavior in competition against students with similar levels of past behavior

Does the classroom management procedure require the same response to all instances of inappropriate behavior for all students on all occasions, or is flexibility used in responding to misconduct?

> The responses are tailored to the individual student ( No); Classroom rules are in effect only on certain days or on certain occasions ( No); The rules apply to all situations and are always applied; The program does not involve responses to student misconduct (No)

*continued . . .*

Appendix Table 2: *Items Included in Best Practices Scale: Methods (continued)*

| |
|---|
| Does your classroom management program make use of any of the following techniques or procedures **in response to student misconduct?** |
| Nonverbal cues such as making eye contact; Quickly returning the class to on-task behavior; Moving closer to the student; Using group alerting, accountability, or higher participation formats to draw students back into a lesson; Redirecting off-task behavior; Providing needed instruction; Telling students to stop the undesired behavior; Giving the student a choice between behaving appropriately or being punished; Using "I-messages;" Withholding privilege or desired activity; Isolating or removing students; Using fines or penalties; Assigning detention; Using individual contract with a student; Having a conference with the parent; Using a check or demerit system; Sending a student to the office; Using other school-based consequences |
| Does this classroom management program have requirements about the consequences for violations of classroom rules? ( Consequences are specified in advance and posted in the classroom) |

Additional copies available from:
GOTTFREDSON ASSOCIATES, INC.
3239 B Corporate Court
Ellicott City, MD 21042
410-461-5530
Toll free 888-733-9805